SMD COMMON MODE LINE FILTER

CM02 SERIES

FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

COMMON APPLCATIONS:

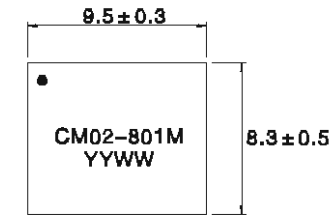
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

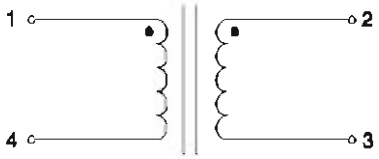
ELECTRICAL CHARACTERISTICS@25℃

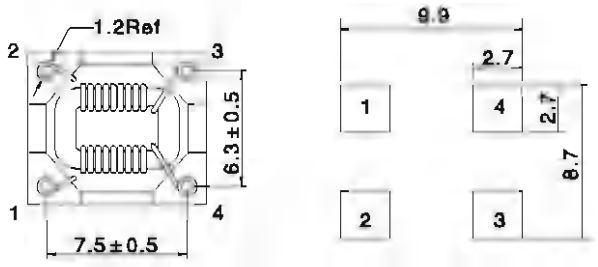
Part Number	Inductance (uH) Typ.	Impedance (Ω) ±25% @100MHz	Rated current (A)	DCR (mΩ)Max
CM02-501M	5.0	500	5.0	5.5
CM02-801M	9.0	800	3.5	13.2
CM02-102M	11.0	1000	2.5	30.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)







Note:

- Inductance Testing: 1KHz 1V HP4284A
- Z test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milohmmeter
- Operating temperature: -40℃ to +105℃
- Storage Temperature: -40℃℃ to +105℃℃
- Realatance to soldering heat:260℃ for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.

COMMON MODE CHOKES FOR LINE FILTER

CM4001 SERIES

FEATURES:

- Current rating up to 1.4A
- Inductance range: 120 to 5000uH
- Frequency range to 200 MHz
- RoHS compliant

OPTIONS:

- Packaging:Tape & Reel is standard
  Bulk packaging available for smaller quantities

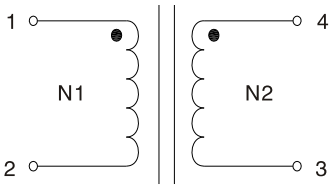
COMMON APPLICATIONS:

- EMI suppression
- DC–DC Converter
- Input/Output line fitter
- RFI noise suppression

ELECTRICAL CHARACTERISTICS:

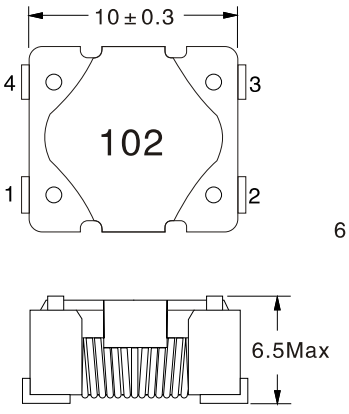
Part Number	L(0A) μH ± 40%	Lk uH(Max)	DCR(Ω) each winding	Impedance(Z)		Rated voltage (Vdc)	Rated current (A)
				Freq. range (MHz)	Min Value (Ω)		
CM4001–121Y	120	1.45	0.025	10–200	200	50	1.40
CM4001–251Y	250	3.2	0.035	5–100	400	50	1.19
CM4001–501Y	500	5.6	0.070	2–50	800	50	0.84
CM4001–102Y	1000	12	0.180	1–40	1400	50	0.52
CM4001–202Y	2000	0.23	0.270	0.5–15	2000	50	0.40
CM4001–302Y	3000	0.26	0.330	0.5–10	3000	50	0.35
CM4001–402Y	4000	0.27	0.550	0.5–5	4000	50	0.30
CM4001–472Y	4700	0.28	1.000	0.6–3	6200	50	0.25
CM4001–502Y	5000	0.29	0.620	0.5–3	5000	50	0.25

SCHEMATIC

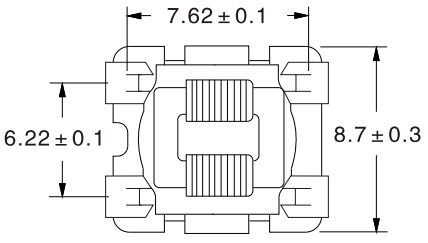


NOTES:
1. Temperature Rise: 45℃ at rated current
2. Hi–Pot: 1000 Vrms,60Hz,3mA,1min
   @120–1000uH
   300 Vrms,60Hz,3mA,1min
   @2000–5000uH
3. Operating Temperature:
   –40℃ to +105℃(Temperature rise included)
4. Storage Temperature:
   –40 ℃ to +105℃
   Solderability: 245℃ for 5 sec
5. Core Material .....Ferrite
6. Base .....Phenolic
7. Wire .....Enameled copper
8. Terminal coating .....Sn
9. Packaging.....800 pcs. per 13–inch reel

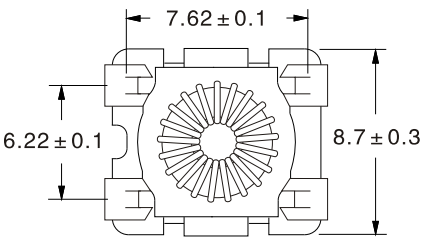
PHYSICAL CHARACTERISTICS(Dimensions:mm)

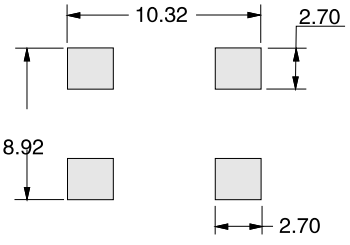


121Y–102Y



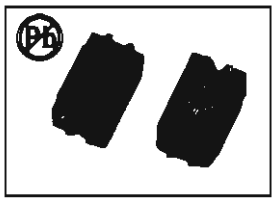
202Y–502Y





Recommended Layout

Note:All specifications subject to change without notice.



EMI LINE FILTER

SF0503 SERIES

FEATURES:

- Rated Current 100mA
- Inductance range: 11 to 100uH
- RoHS compliant

OPTIONS:

- Packaging:Tape & Reel is standard
  Bulk packaging available for smaller quantities

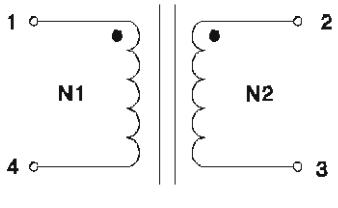
COMMON APPLICATIONS:

- DC–DC Conversion
- Isolation /Coupling
- Input filter
- Against CMC noise at composite
- EMI suppression

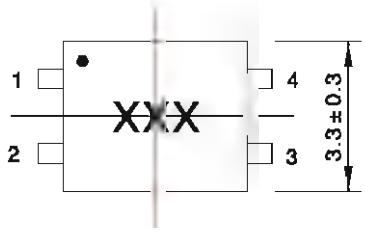
ELECTRICAL CHARACTERISTICS:@25℃

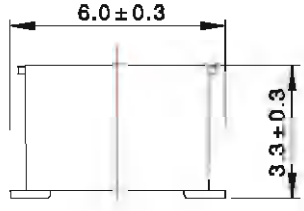
Part Number	L(0A) (uH)+50%/–30% 10KHz,0.1V	Frequency Range(MHz)	Impedance Z(Ω)Min	DCR(mΩ)Max each winding	Rated current (mA)
SF0503–110Y	11	100–400	450	180	100
SF0503–220Y	22	40–250	900	230	100
SF0503–330Y	33	30–180	1000	270	100
SF0503–500Y	50	20–80	1200	320	100
SF0503–101Y	100	10–50	1400	450	100

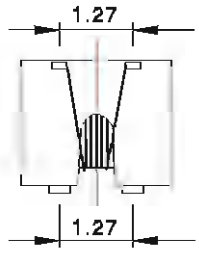
SCHEMATIC



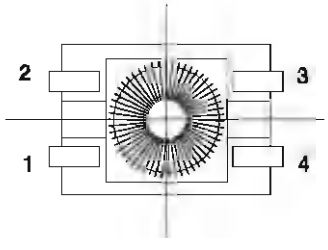
PHYSICAL CHARACTERISTICS

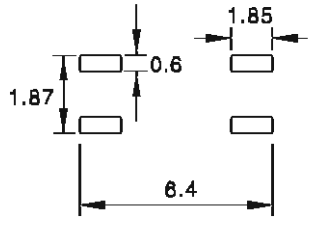






NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   –40℃ to +125℃(Temperature rise included)
4. Storage Temperature:
   –40 ℃ to +125℃
   Solderability: 245℃ for 5 sec
5. Core Material .....Ferrita
6. Wire .....Enameled copper
7. Terminal coating .....Sn
8. Packaging.....1000 pcs. per 13–inch reel





Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

SF0504 SERIES

FEATURES:

- High common mode impedance at high frequency effects excellent noise suppression performance.

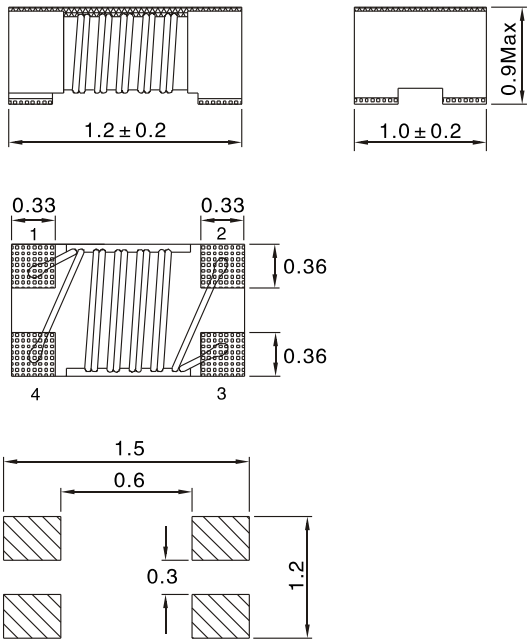
APPLCATIONS:

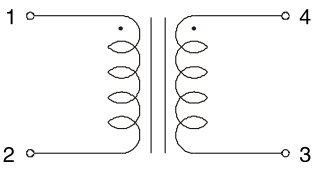
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

ELECTRICAL CHARACTERISTICS:

Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (mA) Max	Rated Voltage (V)	Insulation resistance (Min)
SF0504–250	25	100	0.3	300	20	10MΩ
SF0504–600	60	100	0.4	300	20	10MΩ
SF0504–670	67	100	0.4	300	20	10MΩ
SF0504–900	90	100	0.5	280	20	10MΩ
SF0504–121	120	100	0.55	270	20	10MΩ
SF0504–161	160	100	0.58	260	20	10MΩ
SF0504–181	180	100	0.6	260	20	10MΩ
SF0504–251	250	100	0.7	230	20	10MΩ
SF0504–331	330	100	0.8	200	20	10MΩ

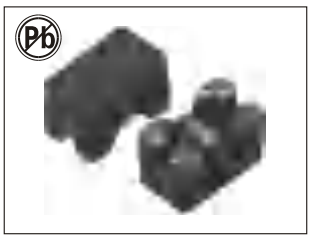
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- Inductance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

Note:All specifications subject to change without notice.

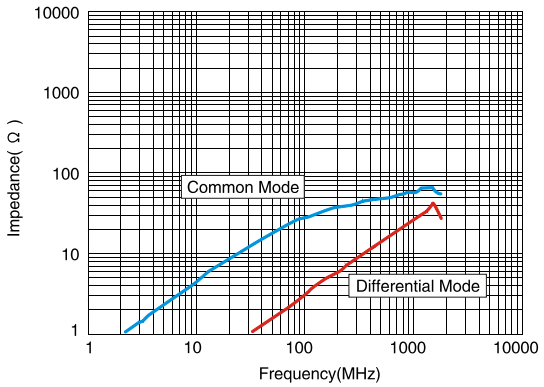


SMD WIRE WOUND COMMON MODE FILTER

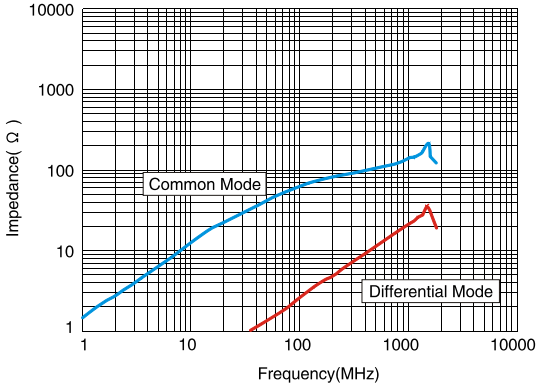
SF0504 SERIES

IMPEDANCE FREQUENCY:

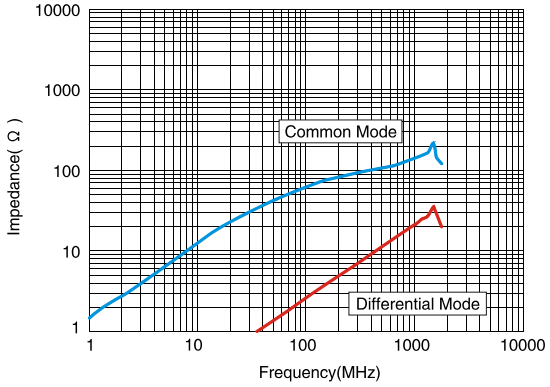
SF0504-250



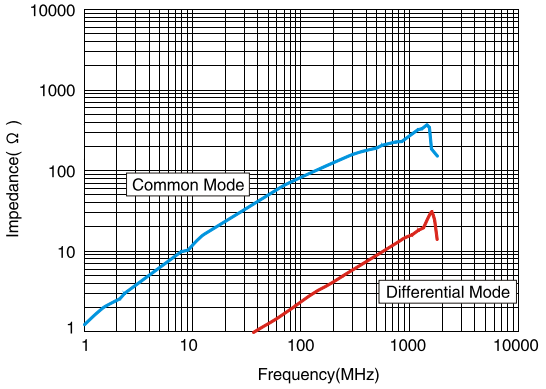
SF0504-600



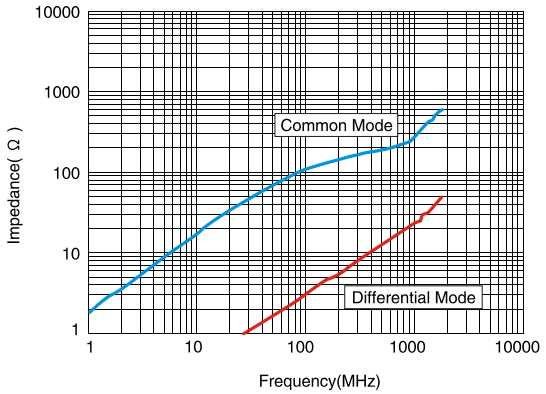
SF0504-670



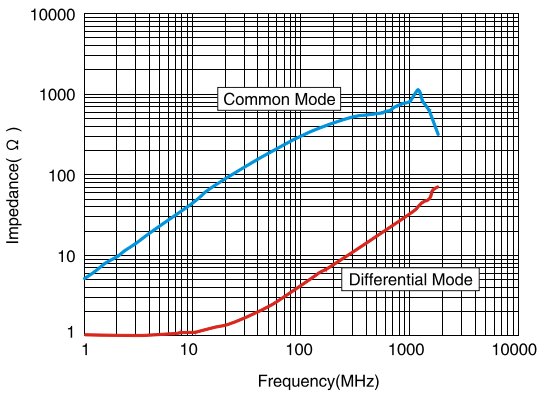
SF0504-900



SF0504-121



SF0504-331



LINE FILTER

SF0602 SERIES

FEATURES:

- Current rating up to 300mA
- Inductance range: 10 to 330uH
- Frequency range to 1600 MHz
- RoHS compliant

OPTIONS:

- Packaging:Tape & Reel is standard
  Bulk packaging available for smaller quantities

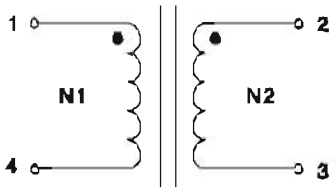
COMMON APPLICATIONS:

- DC-DC Conversion
- Isolation /Coupling
- Input filter
- Against CMC noise at composite
- EMI suppression

ELECTRICAL CHARACTERISTICS:@25℃

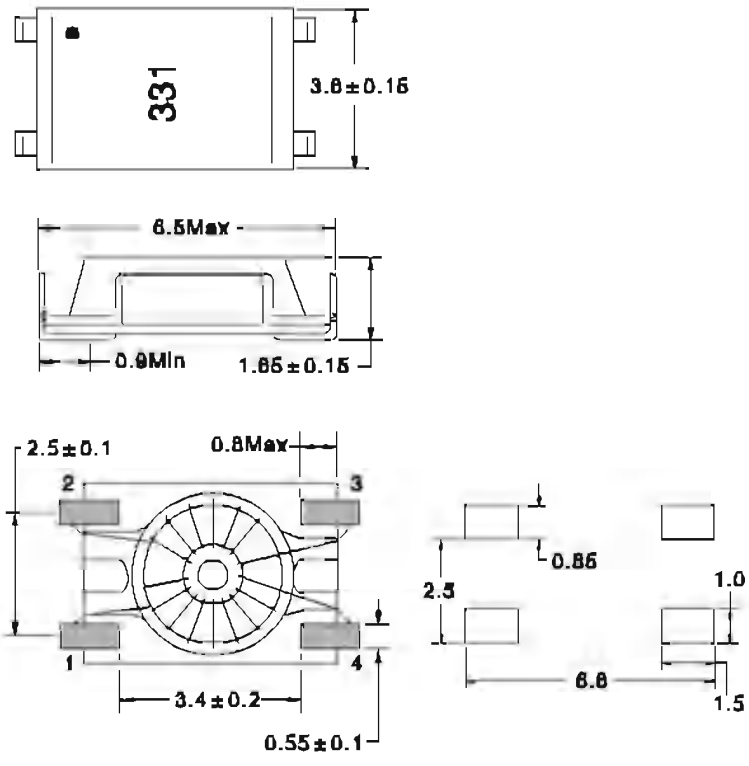
Part Number	L (μH) 10KHz,2mV	Lk (μH) Max 10KHz,2mV	DCR(mΩ)Max each winding	Rated current (mA)	Impedance(Z)	
					Frequency Range (MHz)	Min value (Ω)
SF0602-100Y	10±50%	1	240	300	35-570	600
SF0602-470Y	47±50%	4	160	300	4-1600	140
SF0602-820Y	82±50%	4	200	300	3-850	220
SF0602-101Y	100±50%	8	220	300	3-660	260
SF0602-181Y	180±50%	8	250	300	3-250	500
SF0602-221Y	220±50%	10	280	300	3-210	600
SF0602-331Y	330±50%	10	300	300	3-120	900

SCHEMATIC



NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   -40℃ to +105℃(Temperature rise included)
4. Storage Temperature:
   -40 ℃ to +105℃
   Solderability: 260℃ for 5 sec
5. Core Material .....Ferrite
6. Wire .....Enameled copper
7. Terminal coating .....Sn
8. Base .....LCP
9. Packaging.....1000 pcs. per 7-inch reel

PHYSICAL CHARACTERISTICS



Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

SF0805 SERIES

FEATURES:

- High common mode impedance at high frequency effects excellent noise suppression performance.

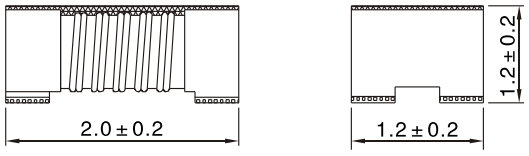
APPLCATIONS:

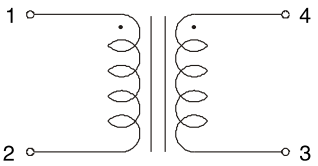
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

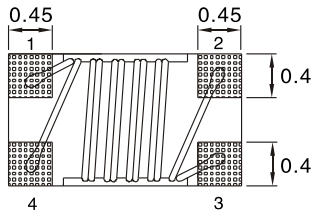
ELECTRICAL CHARACTERISTICS:

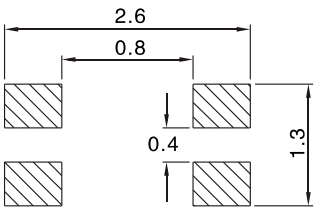
Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (mA) Max	Rated Voltage (V)	Insulation resistance (Min)
SF0805–240	24	100	0.25	420	50	10MΩ
SF0805–250	25	100	0.25	420	50	10MΩ
SF0805–320	32	100	0.25	400	50	10MΩ
SF0805–600	60	100	0.30	300	50	10MΩ
SF0805–670	67	100	0.30	400	50	10MΩ
SF0805–900	90	100	0.30	400	50	10MΩ
SF0805–121	120	100	0.30	350	50	10MΩ
SF0805–161	160	100	0.30	350	50	10MΩ
SF0805–181	180	100	0.35	330	50	10MΩ
SF0805–221	220	100	0.35	330	50	10MΩ
SF0805–261	260	100	0.40	300	50	10MΩ
SF0805–361	360	100	0.40	280	50	10MΩ

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:









- Impedance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

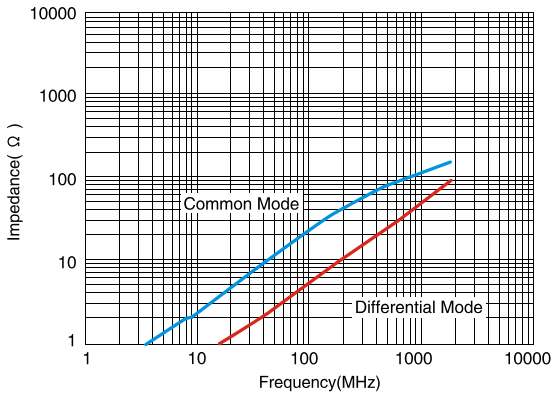
Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

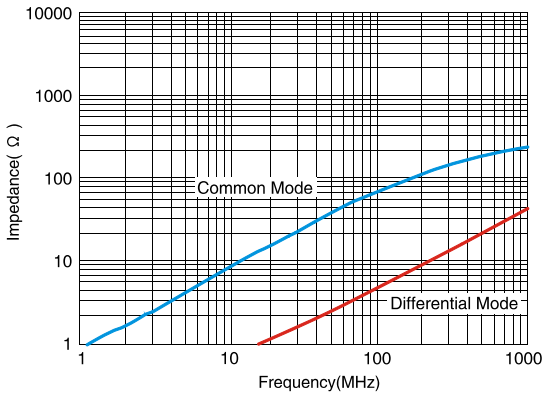
SF0805 SERIES

IMPEDANCE FREQUENCY:

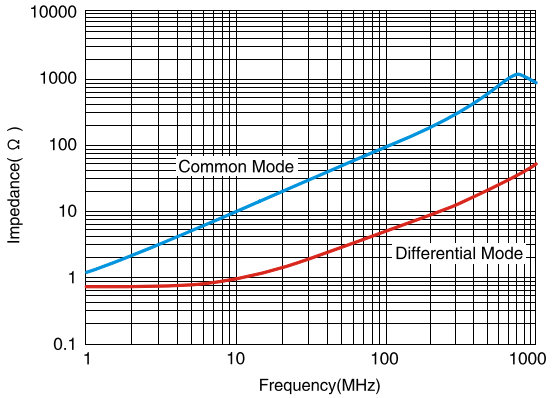
SF0805-240



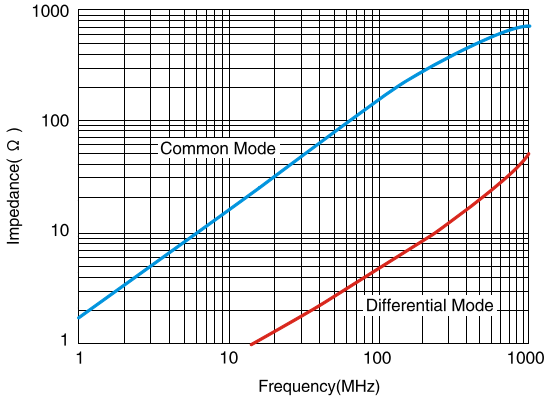
SF0805-600



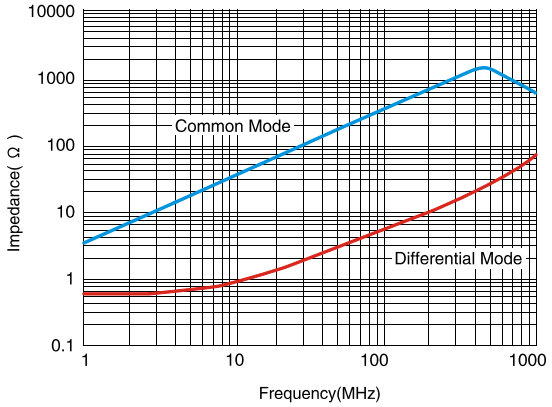
SF0805-900

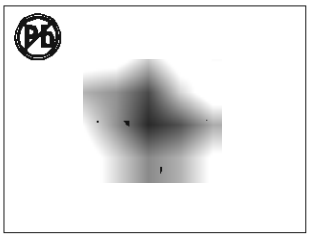


SF0805-161



SF0805-361





SMD LINE FILTER

SF0903 SERIES

FEATURES:

- Low profile very effective in space conscious applications
- Low resistance filters have been designed for excellent electrical isolation
- High quality toroidal core
- Wide frequency range over 1000MHz
- Lead free construction

OPTIONS:

- Tape & Reel is Standard Bulk packaging Available for Smaller Quantities

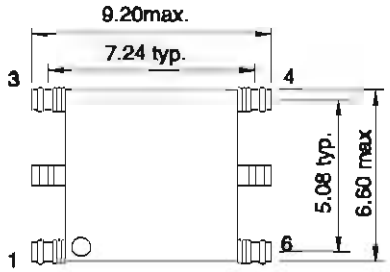
COMMON APPLCATIONS:

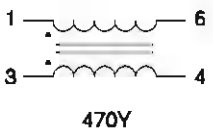
- Provide common mode noise attenuation
- Reduce conducted noise
- For the suppression of EMI in data lines and signal lines,e.g.,CAN Bus

ELECTRICAL CHARACTERISTICS:

Part Number	L(μH) 100K/0.1V	L-L(μH) 100K/0.02V	C(pF) 100K/0.02V	DCR(Ω) max.	Turns Ratio	Insertion Loss		Impedance(z)	
SF0903						Freq.rang	db	Freq.rang	min(Ω)
470YAB	47.0 min.	0.18^{+0}	20^{+0}	0.4	1:1	1~100MHz	20^{-0}	10~30MHz	1000
200YAB	20.0 min.	0.10^{+0}	18^{+0}	0.4	1:1:1	30~300MHz	20^{-0}	30~100MHz	800

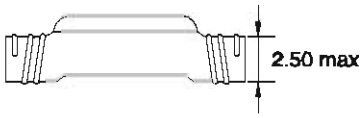
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

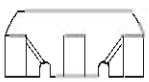


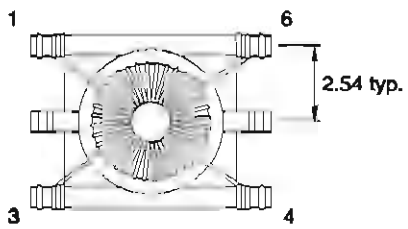


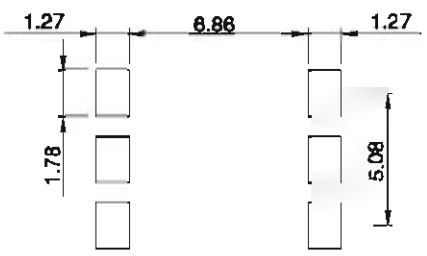
470Y

200Y









PCB layout

General Specification:

1. Storage Temperature: −40℃ – +105℃
2. Operation Temperature: −25℃ – +85℃
3. Temperature Rise Included: 30℃ max at Rated Current
4. Resistance to solder heat: 260℃,10 secs.

SMD LINE FILTER

SF0904 SERIES

FEATURES:

- Low profile very effective in space conscious applications
- Low resistance filters have been designed for excellent electrical isolation
- High quality toroidal core
- Lead free construction
- RoHS-compatible

OPTIONS:

- Tape & Reel is Standard Bulk packaging Available for Smaller Quantities

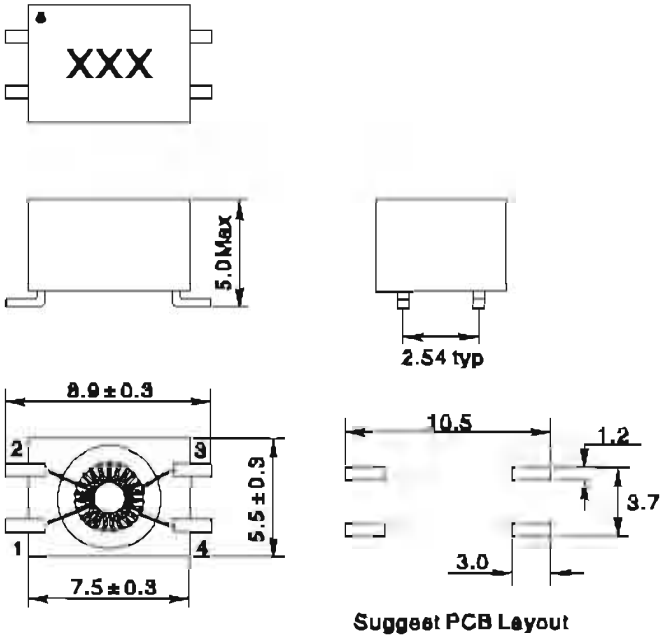
COMMON APPLCATIONS:

- Provide common mode noise attenuation
- Reduce conducted noise
- For the suppression of EMI in data lines and signal lines, e.g., CAN Bus

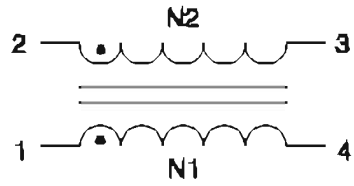
ELECTRICAL CHARACTERISTICS:

Part Number	L(1-4)(uH) ≤1mH@100KHz >1mH@10KHz +50%/-30%	LK(1-4)(nH) ≤11uH@1MHz >11uH@100KHz (2-3 short)max.	DCR (winding) (mΩ) max.	Rated Current (mA)max.	Hi-Pot Vdc,2S
SF0904-110Y	11.0	50	80	500	250
SF0904-250Y	25.0	60	110	500	250
SF0904-510Y	51.0	70	140	500	250
SF0904-471Y	470	100	170	500	250
SF0904-102Y	1000	100	170	500	250
SF0904-222Y	2200	200	400	400	250
SF0904-472Y	4700	300	510	200	250

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



Suggest PCB Layout



- Materials:
  1. Core: Ferrite Toroidal Core
  2. Wire: Enamelled Copper Wire(Class F)
  3. Case: PPHS (UL94V-0)
  4. Terminal: Cu / Ni / Sn
  5. Adhesive: Epoxy Resin
- General Specification:
  1. Storage Temperature: -40℃~+125℃
  2. Operation Temperature: -40℃~+85℃
  3. Temperature Rise Included: 40℃ max at Rated Current
  4. Resistance to solder heat: 260℃,10 secs.

Note:
All specifications subject to change without notice.

COMMON MODE CHOKE

SF0904A SERIES

FEATURES:

- The circular type, small size and low profile
- Suppression of common mode noise at high frequency
- Excellent mechanical
- AEC-Q200 verified
- Operating temperature: -50℃ to +150℃

APPLCATIONS:

- Data and signal line

OPTIONS:

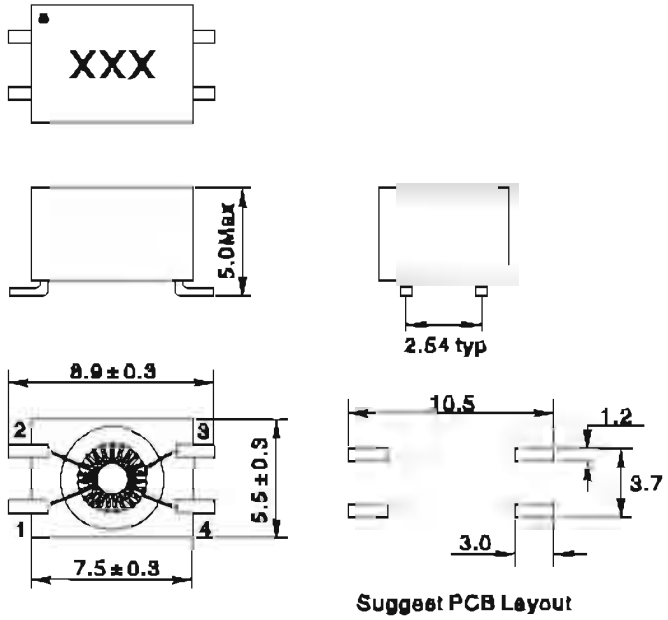
- Tape & Reel is Standard

ELECTRICAL CHARACTERISTICS:

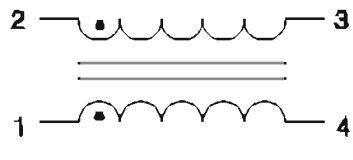
Part Number	Inductance (uH)	LK(nH) Typ.	DCR (Ω) max.	Rated Current (mA) max.	Vtest (Vdc/2S)	Operating temperature range(℃)
SF0904A-5R0N	5 ± 30%	40@1MHz	0.06	1200	250	-50 ~ +150
SF0904A-110N	11 ± 30%	50@1MHz	0.08	800	250	-50 ~ +150
SF0904A-250N	25 ± 30%	80@100KHz	0.11	800	250	-50 ~ +150
SF0904A-250NS	25 ± 30%	1400@100KHz	0.11	800	250	-50 ~ +150
SF0904A-510N	51 ± 30%	70@100KHz	0.14	800	250	-50 ~ +150
SF0904A-510NS	51 ± 30%	2300@100KHz	0.14	800	250	-50 ~ +150
SF0904A-101N	100 ± 30%	100@100KHz	0.18	500	250	-50 ~ +150
SF0904A-471N	470 ± 30%	100@100KHz	0.17	700	750	-40 ~ +125
SF0904A-102Y	1000 +50%/-30%	70@100KHz	0.14	700	750	-40 ~ +125
SF0904A-222Y	2200 +50%/-30%	120@100KHz	0.4	500	750	-40 ~ +125
SF0904A-472Y	4700 +50%/-30%	250@100KHz	0.55	400	750	-40 ~ +125

1. Inductance test frequency: ≤1000uH ,100KHz,0.1V
   >1000uH ,10KHz,0.1V
2. Storage Temperature Range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)
3. Rated Voltage:42VAC (50/60Hz) / 80VDC
4. Products with other electrical characteristics can be provided upon customer' s request.

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

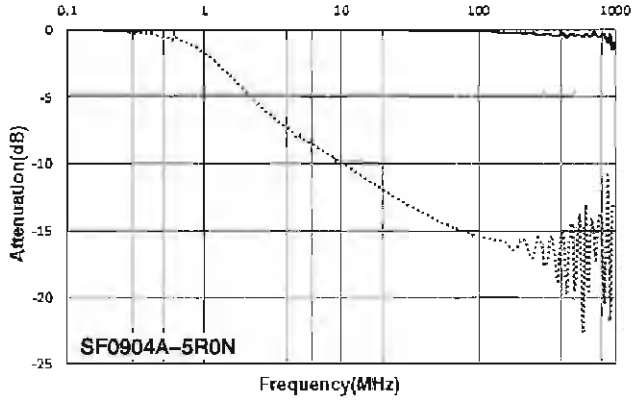


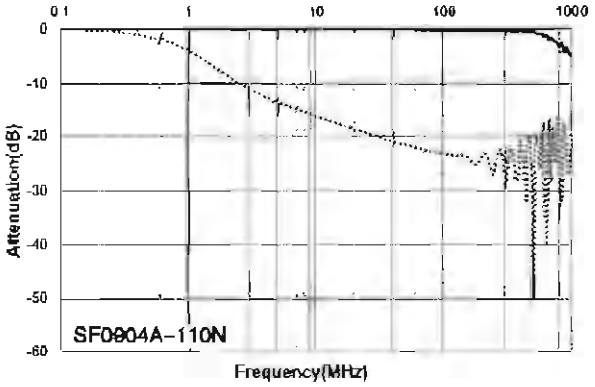
Suggest PCB Layout

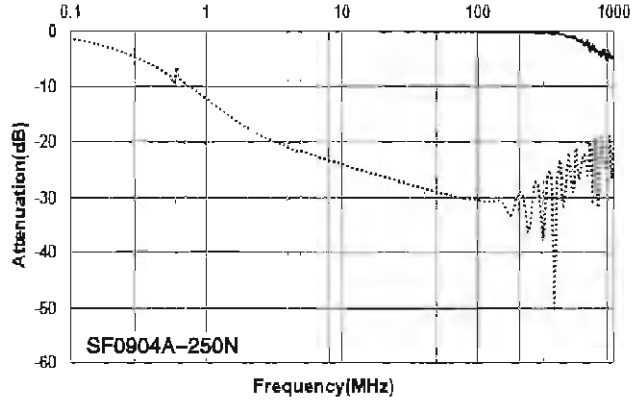


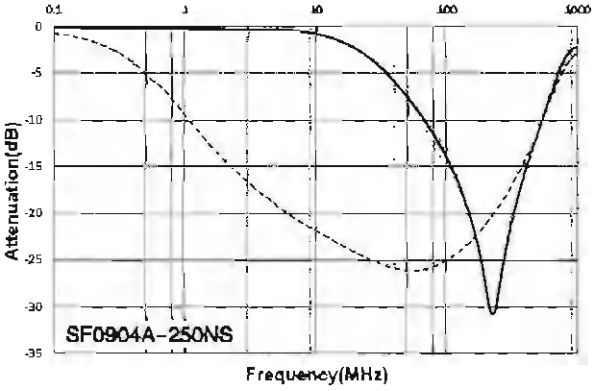
Note:
All specifications subject to change without notice.

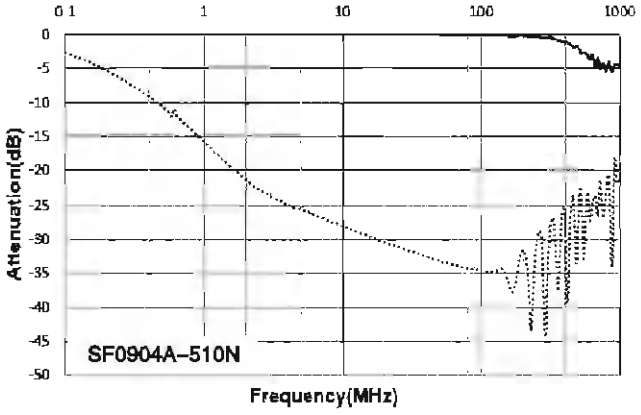
TYPICAL ELECTRICAL CHARACTERISTICS

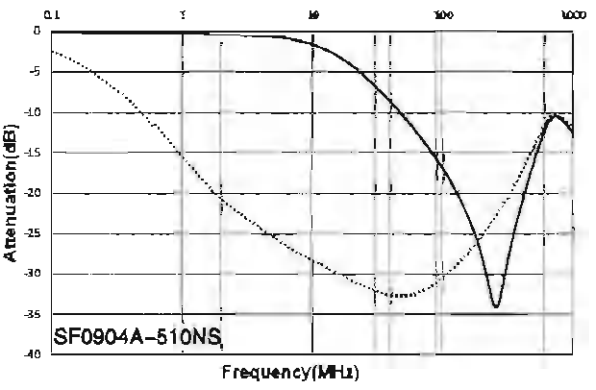


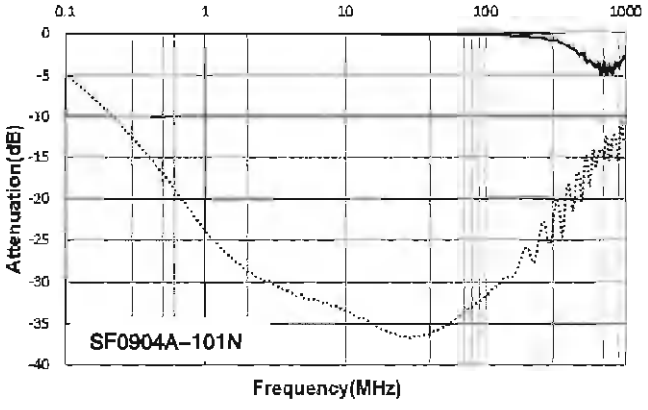


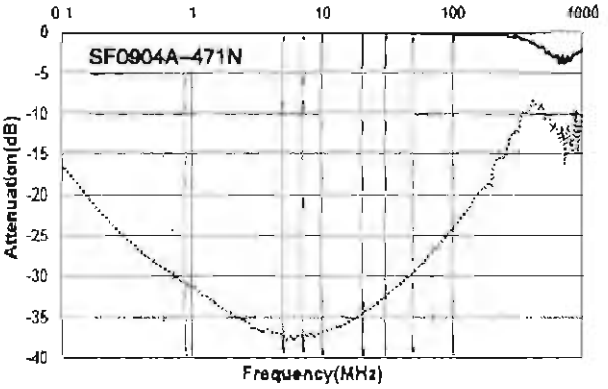




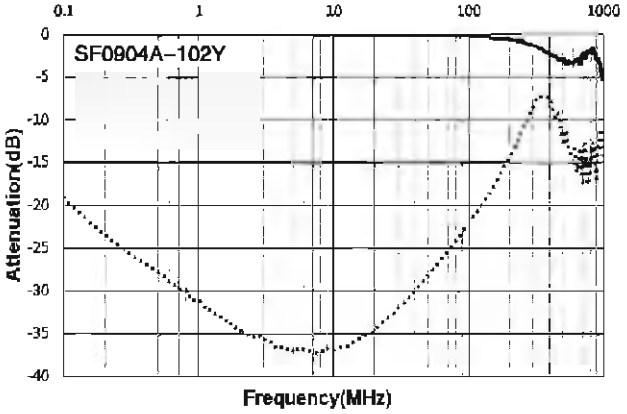


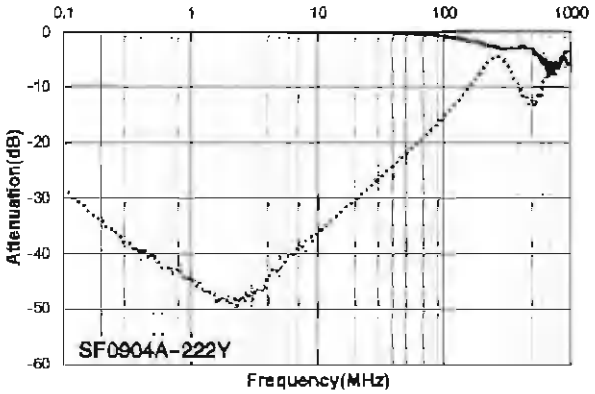


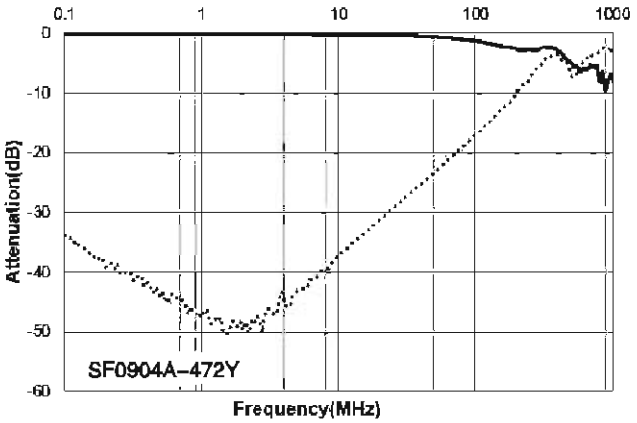




TYPICAL ELECTRICAL CHARACTERISTICS







LINE FILTER

SF0905 SERIES

FEATURES:

- Current rating up to 1.6A
- Inductance range: 10 to 8500uH
- Frequency range to 300 MHz
- RoHS compliant

OPTIONS:

- Packaging:Tape & Reel is standard Bulk packaging available for smaller quantities

COMMON APPLICATIONS:

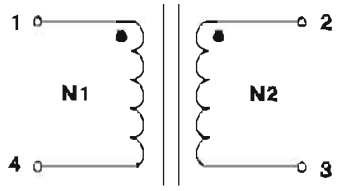
- DC-DC Conversion
- Isolation /Coupling
- Input filter
- Against CMC noise at composite
- EMI suppression

ELECTRICAL CHARACTERISTICS:@25℃

Part Number	L (μH)	Lk (nH) typ @1MHz	DCR(mΩ)Max each winding	Rated current (A)	Impedance(Z)	
					Frequency Range (MHz)	Min value (Ω)
SF0905-100Y	10±50%	850	80	1.6	20-300	200
SF0905-250Y	25±50%	1942	160	1.0	20-150	600
SF0905-400Y	40±50%	2812	250	0.9	20-100	800
SF0905-500Y	50±50%	3150	320	0.8	20-100	1500
SF0905-251Y	250±50%	110	130	1.2	3-20	800
SF0905-471Y	470±50%	120	140	1.1	2-20	1000
SF0905-501Y	500±50%	120	150	1.0	1-20	1000
SF0905-102Y	1000±50%	170	310	0.8	1-15	1500
SF0905-202Y	2000±50%	250	420	0.6	1-5	3000
SF0905-472Y	4700±50%	360	900	0.4	0.3-3	4000
SF0905-852Y	8500±50%	390	1050	0.3	0.3-2	5000

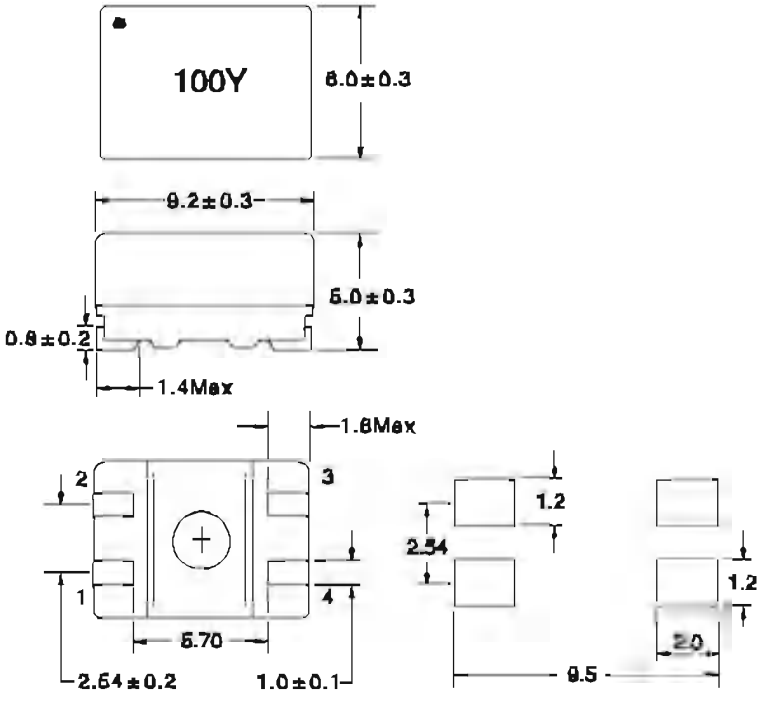
Test condition: 10-50uH: 1KHz,0.1V; 250-8500uH: 100KHz,5mV

SCHEMATIC



NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   -40℃ to +105℃(Temperature rise included)
4. Storage Temperature:
   -40 ℃ to +105℃
   Solderability: 260℃ for 5 sec
5. Core Material .....Ferrite
6. Wire .....Enamaled copper
7. Terminal coating .....Sn
8. Base .....LCP
9. Packaging.....1000 pcs. per 13-inch reel

PHYSICAL CHARACTERISTICS



Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

SF1206 SERIES

FEATURES:

- High common mode impedance at high frequency effects excellent noise suppression performance.

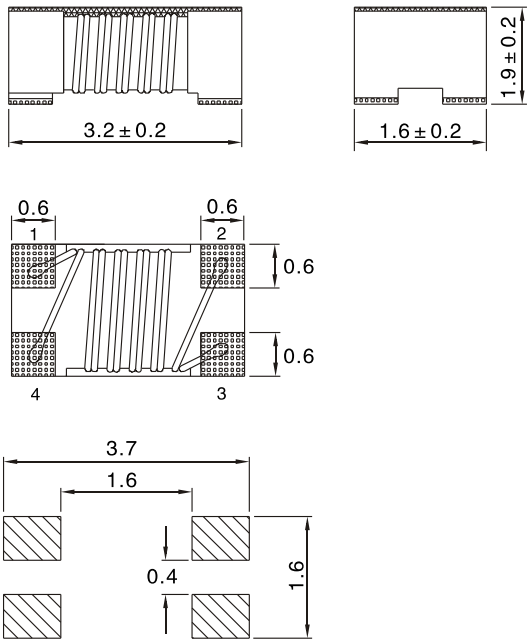
APPLCATIONS:

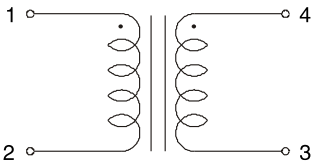
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

ELECTRICAL CHARACTERISTICS:

Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (mA) Max	Rated Voltage (V)	Insulation resistance (Min)
SF1206–370	37	100	0.10	1000	50	10MΩ
SF1206–101	100	100	0.14	850	50	10MΩ
SF1206–171	170	100	0.18	700	50	10MΩ
SF1206–261	260	100	0.22	600	50	10MΩ
SF1206–371	370	100	0.26	600	50	10MΩ
SF1206–531	530	100	0.30	600	50	10MΩ
SF1206–671	670	100	0.34	500	50	10MΩ
SF1206–871	870	100	0.39	500	50	10MΩ
SF1206–112	1100	100	0.44	500	50	10MΩ

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- Inductance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

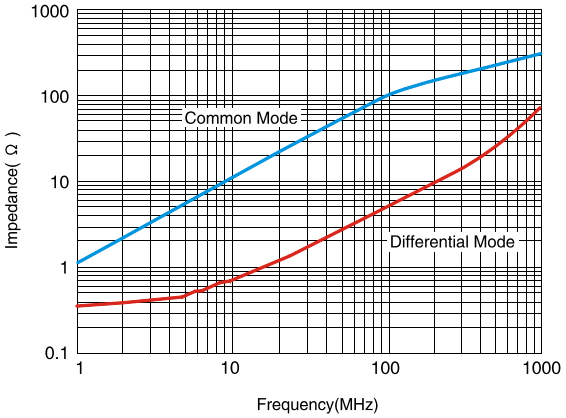
Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

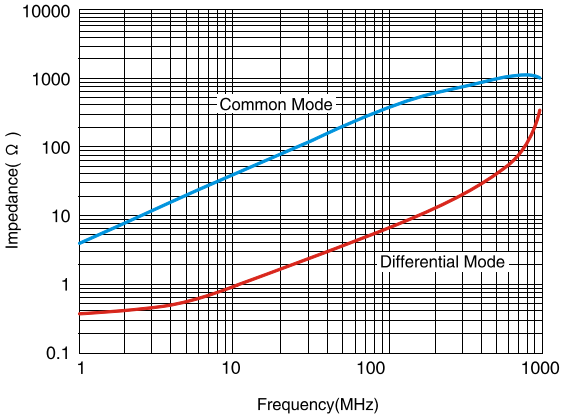
SF1206 SERIES

IMPEDANCE FREQUENCY:

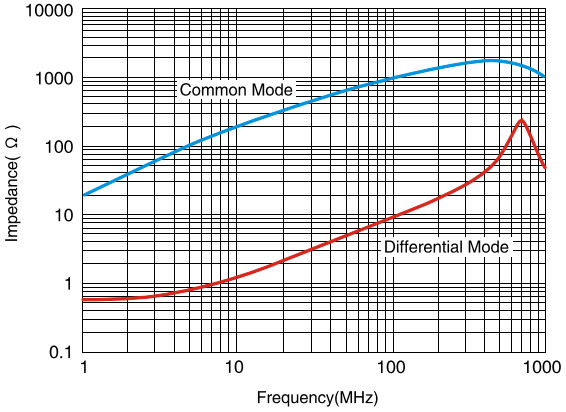
SF1206-101

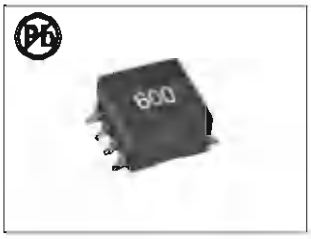


SF1206-371



SF1206-112





SMD LINE FILTER
SF1306 SERIES

FEATURES:

- Low profile very effective in space conscious applications
- Low resistance filters have been designed for excellent electrical isolation
- High quality toroidal core
- Wide frequency range over 1000MHz
- Lead free construction

OPTIONS:

- Tape & Reel is Standard Bulk packaging Available for Smaller Quantities

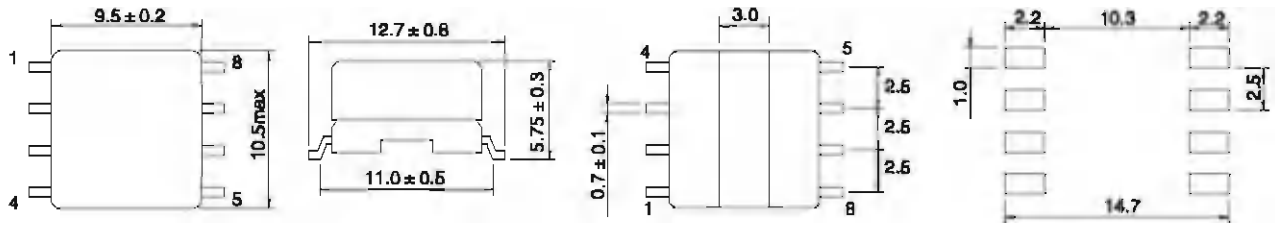
COMMON APPLCATIONS:

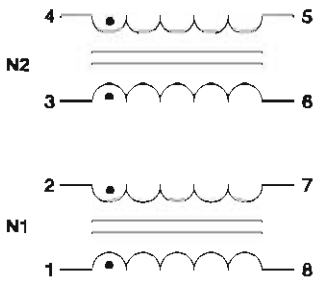
- Provide common mode noise attenuation
- Reduce conducted noise
- For the suppression of EMI in data lines and signal lines,e.g.,CAN Bus

ELECTRICAL CHARACTERISTICS:

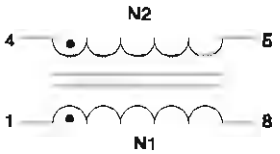
Part Number	Inductance (μ H)		DC resistance N1,N2(Ω)	Rated Current (A)	Impedance (Ω)	Freq. rang (MHz)	Fig
SF1306	L1,L2	L1–L2					
350YA	35±35%	4 max.	0.035 max	2.70max	400 min	5.0–250	B
600YA	60±35%	5 max.	0.065max	2.00max	600min	5.0–100	B
101YA	100±35%	15 max.	0.100max	0.70max	300min	1.0~50	A
251YA	250±35%	25 max.	0.150max	0.60max	600min	1.0–40	A
501YA	500±35%	35 max.	0.300max	0.40max	1200min	1.0~40	A
102YA	1000±35%	45 max.	0.400max	0.35max	2200min	0.5~10	A
501YA	500±35%	35 max.	0.300max	0.40max	1200min	1.0–40	A
102YA	1000±35%	45 max.	0.400max	0.35max	2200min	0.5–10	A

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





FigA



FigB

- Materials:
  1. Core: Ferrite Toroidal Core
  2. Wire: Enamelled Copper Wire
  3. Base: LCP
  4. Terminal: Tinned Copper Plate
  5. Adhesive: Epoxy Resin
  6. Case: LCP
- General Specification:
  1. Storage Temperature: – 25℃ – +85℃
  2. Operating Temperature: – 20℃ – + 80℃
  3. Resistance to solder heat: 260℃,10 secs.

Note: All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

SF1608 SERIES

FEATURES:

- High common mode impedance at high frequency effects excellent noise suppression performance.

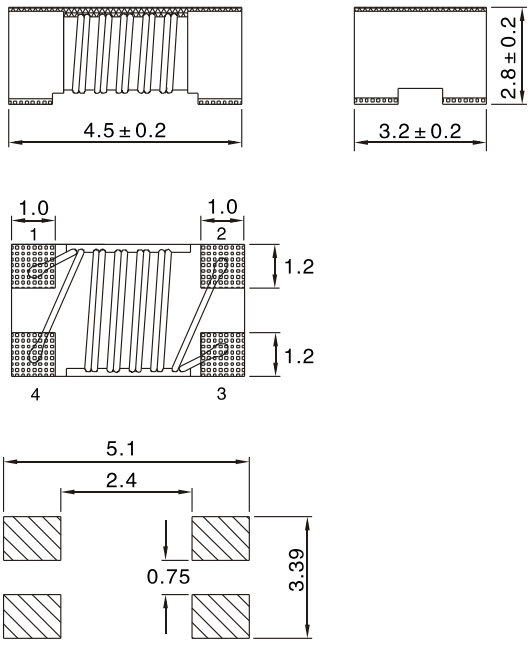
APPLCATIONS:

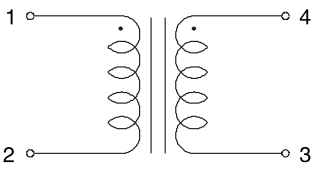
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

ELECTRICAL CHARACTERISTICS:

Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (A) Max	Rated Voltage (V)	Insulation resistance (Min)
SF1608–800	80	100	0.07	3.0	50	10MΩ
SF1608–121	120	100	0.07	3.0	50	10MΩ
SF1608–201	200	100	0.10	2.0	50	10MΩ
SF1608–601	600	100	0.30	1.5	50	10MΩ
SF1608–801	800	100	0.35	1.0	50	10MΩ
SF1608–102	1000	100	0.40	1.0	50	10MΩ

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- Inductance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

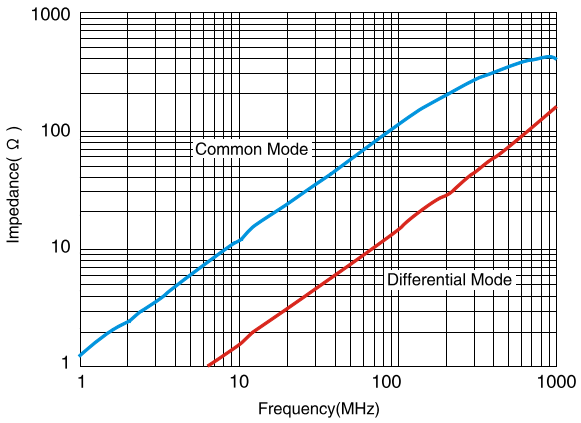
Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

SF1608 SERIES

IMPEDANCE FREQUENCY:

1608-121



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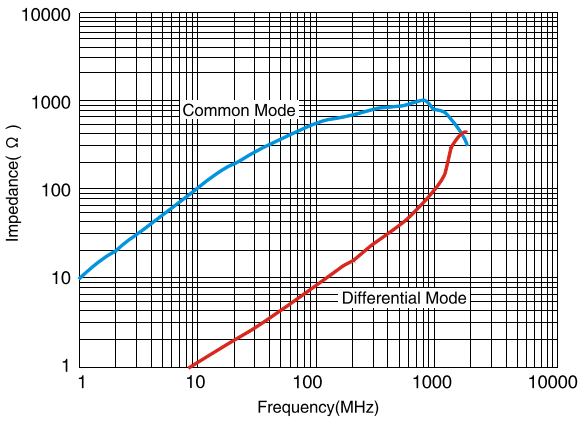

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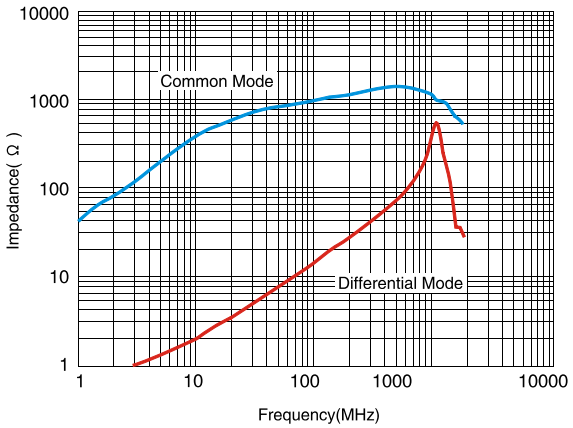


SURFACE–MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES

FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

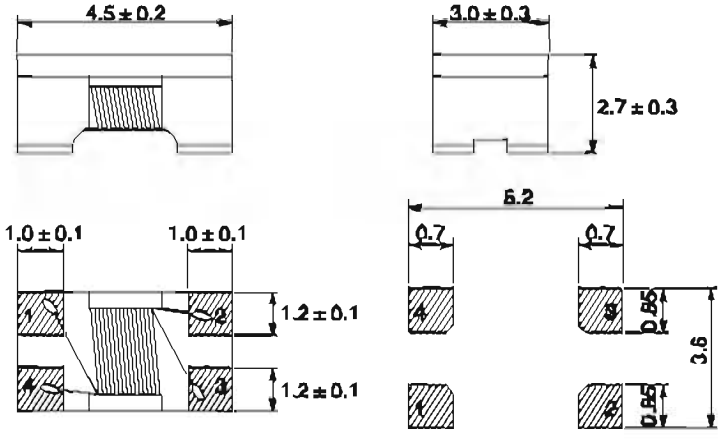
COMMON APPLCATIONS:

- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS,Infotainment, Sensing, TCU
- Automotive Ethernet

ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (uH)+50%/–30% 100KHz	Impedance Z(Ω) ± 25% 100MHz	Rated current (mA)	DCR (Ω).	Rated voltage (Vdc)
SF1812F–600Y	–	60	4100	0.1	60
SF1812F–900Y	0.3	90	3800	0.2	60
SF1812F–121Y	–	120	3600	0.22	60
SF1812F–231Y	–	230	3500	0.22	60
SF1812F–251Y	–	250	3500	0.22	60
SF1812F–421Y	–	420	2850	0.22	60
SF1812F–601Y	1.0	600	2600	0.30	60
SF1812F–701Y	–	700	2500	0.15	60
SF1812F–801Y	1.3	800	2300	0.16	60
SF1812F–102Y	–	1000	1750	0.40	60
SF1812F–122Y	–	1200	1700	0.40	60
SF1812F–142Y	–	1400	1700	0.40	60
SF1812F–282Y	4.2	2800	800	0.80	60
SF1812F–502Y	11	5000	580	0.80	60
SF1812F–582Y	–	5800	350	2.00	60
SF1812F–802Y	22	8000	320	2.65	60

PHYSICAL CHARACTERISTICS:



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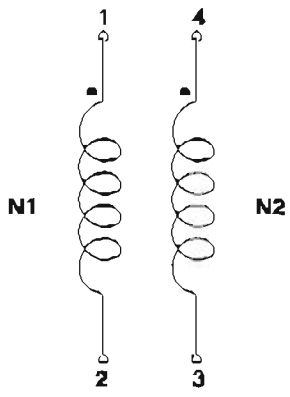

GENERAL SPECIFICATIONS:

Temperature Rise: 40 ℃ at rated current
Operating Temperature: –40 ℃ to +125 ℃ (Temperature rise included)
Storage Temperature: –40 ℃ to +125 ℃
Packageing: Tape & Reel is standard (Qty: 500PCS)
Note:All specifications subject to change without notice.

SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES

FEATURES:

- Ferrite Core bobbin construction
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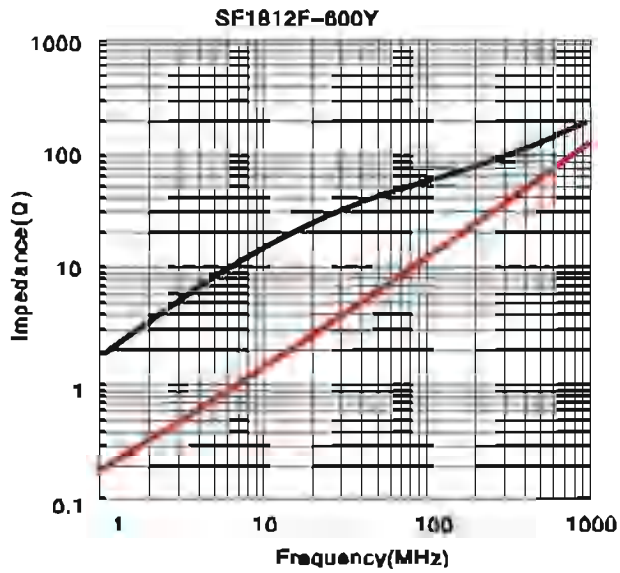
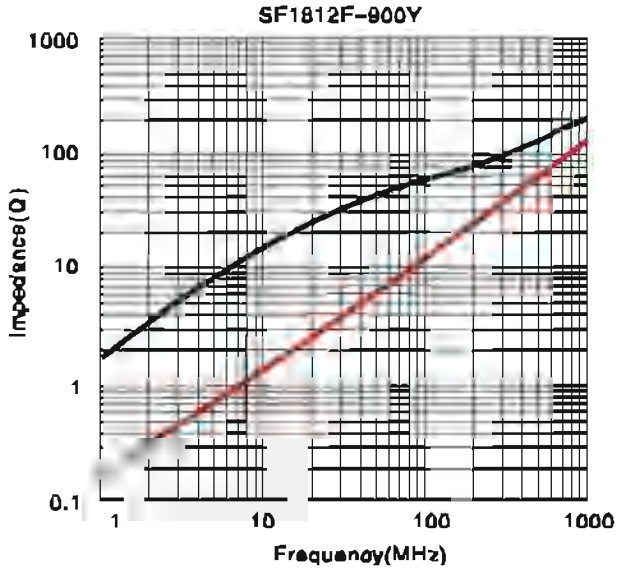
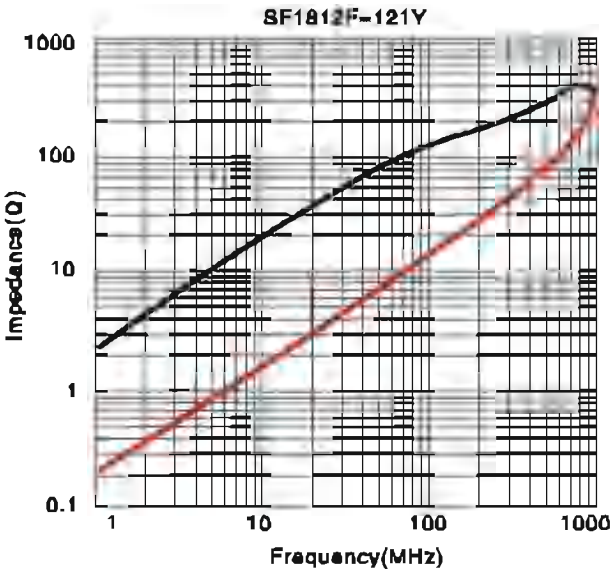
COMMON APPLCATIONS:

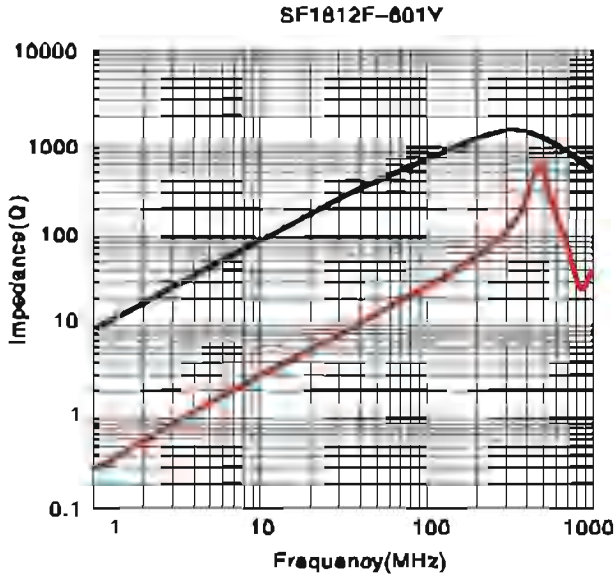
- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS,Infotainment, Sensing, TCU
- Automotive Ethernet

FREQUENCY VS IMPEDANCE









Com Dif

SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES

FEATURES:

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- Low Profile and Low cost

COMMON APPLCATIONS:

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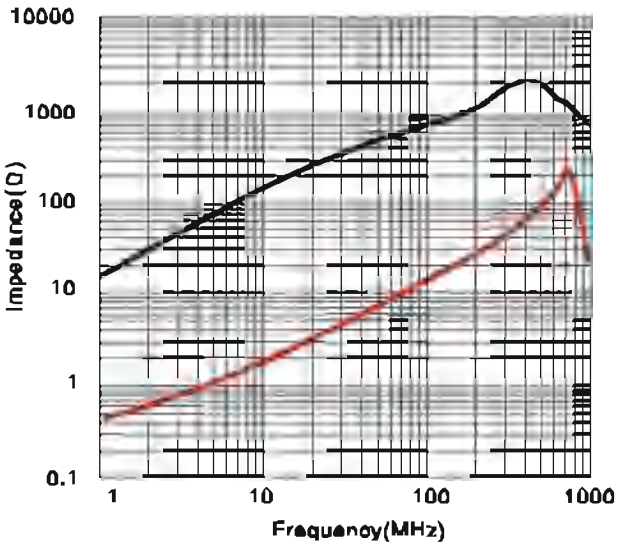
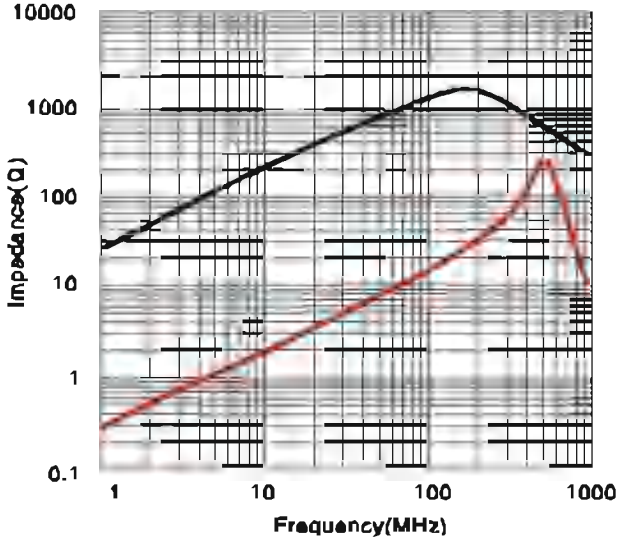
- Multimedia devices
- Automotive applications such as ADAS,Infotainment, Sensing, TCU
- Automotive Ethernet

FREQUENCY VS IMPEDANCE

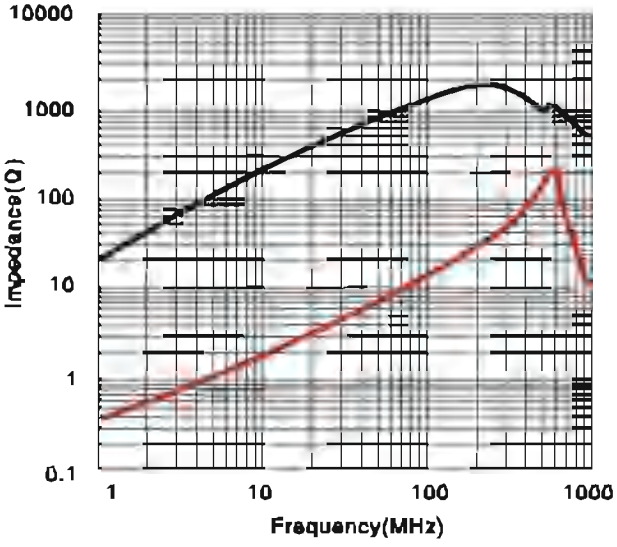
SF1812F-701Y



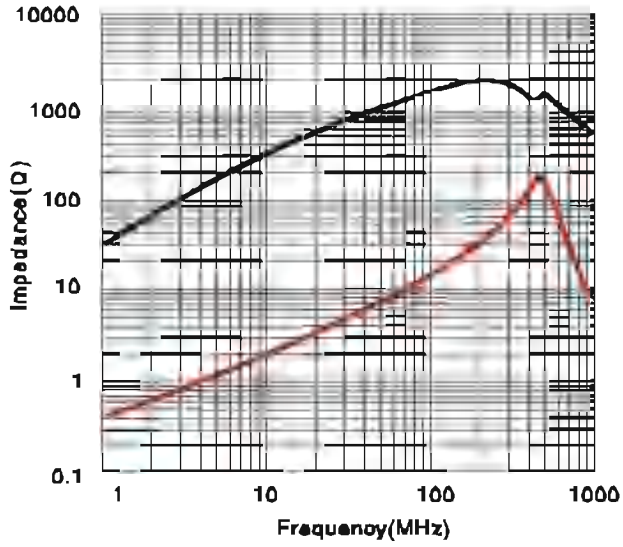
SF1812F-102Y



SF1812F-122Y



SF1812F-142Y



Com Dif

SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES

FEATURES:

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COMMON APPLCATIONS:

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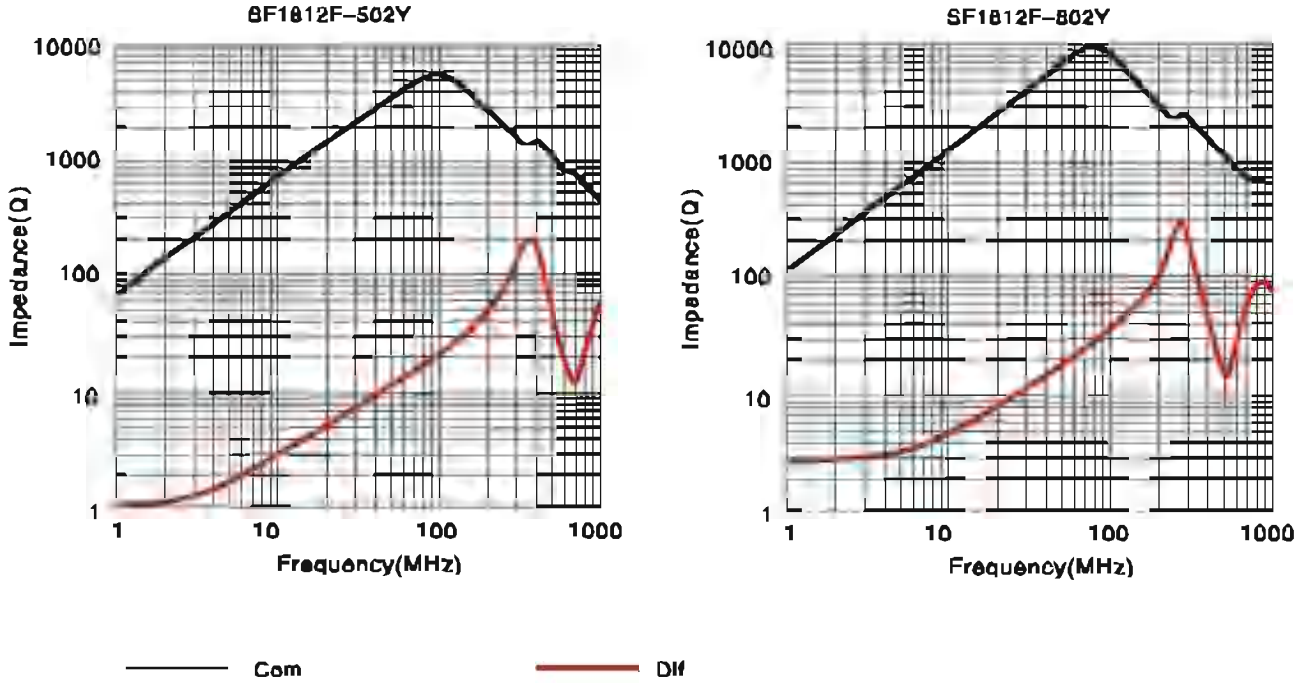
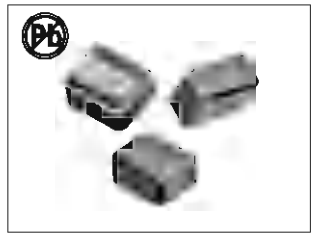
- Multimedia devices
- Automotive applications such as ADAS,Infotainment, Sensing, TCU
- Automotive Ethernet

FREQUENCY VS IMPEDANCE



COUPLED INDUCTORS,COMMON MODE CHOKES
SF1812S SERIES



FEATURES:

- Coupled inductor optimized for xDSL filtering applications
- Can be used as a common mode choke, 1:1 transformer or in SEPIC applications
- Terminations RoHS compliant
- Packaging 600/7" reel; 2200/13" reel

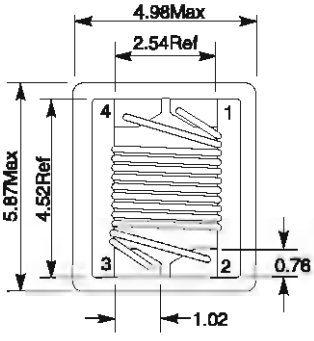
ELECTRICAL CHARACTERISTICS:

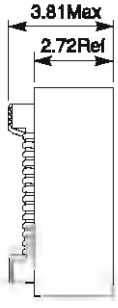
Part number	Inductance ±20%(uH) 100KHz,0.1V	Q 1MHz	DCR Max(Ω)	SRF Min(MHz)	Isat (mA)	Irms (mA)
SF1812S-1R0M	1.0	38	0.2	285	2400	2100
SF1812S-2R2M	2.2	29	0.33	175	1500	1200
SF1812S-4R7M	4.7	43	0.41	102	1500	1000
SF1812S-100M	10	35	0.74	74	800	780
SF1812S-150M	15	37	0.96	65	700	710
SF1812S-220M	22	38	1.84	54	500	530
SF1812S-390M	39	39	2.6	5.7	450	420
SF1812S-470M	47	40	2.66	4.8	400	390

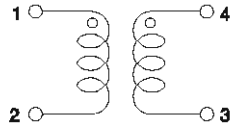
1. DC current at which the inductance drops 10% (typ) from its value without current.
2. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maxi-mum retings.
3. Electrical specifications at 25 ℃ .
4. Ambient temperature -40 ℃ to +85 ℃ with Irms current
5. Maximum part temperature +125 ℃ (ambient + temp rise)
6. Storage temperature Component: -40 ℃ to +125 ℃ . Tape and reel packaging: -40 ℃ to +80 ℃

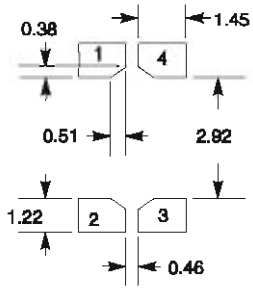
PHYSICAL CHARACTERISTICS & WINDING:

Dimensions are in mm



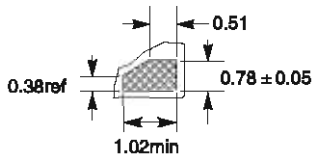






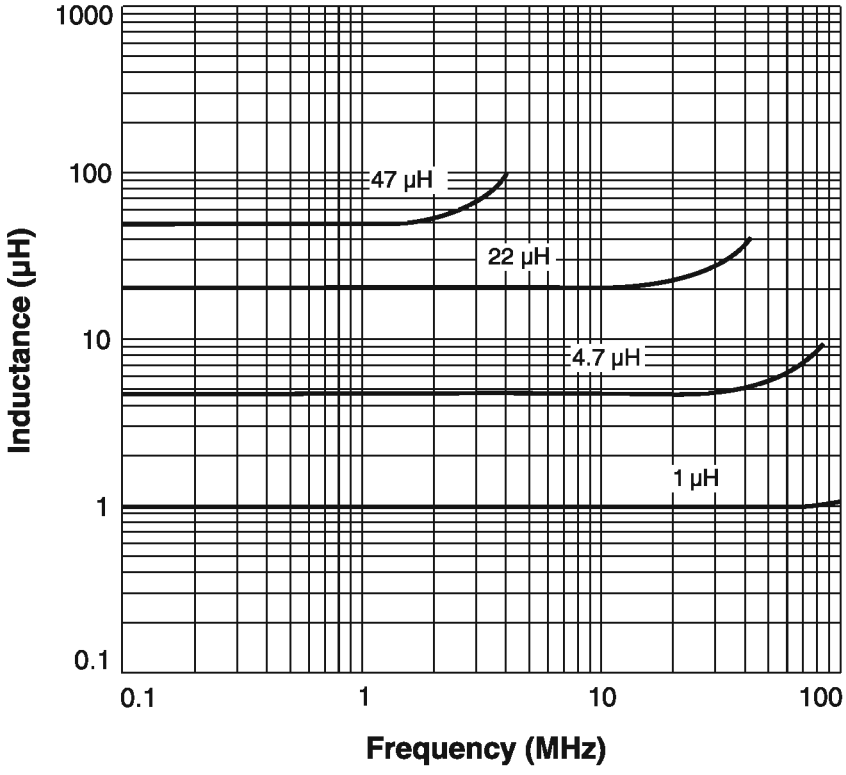
Recommended Land Pattern

Pad Datail

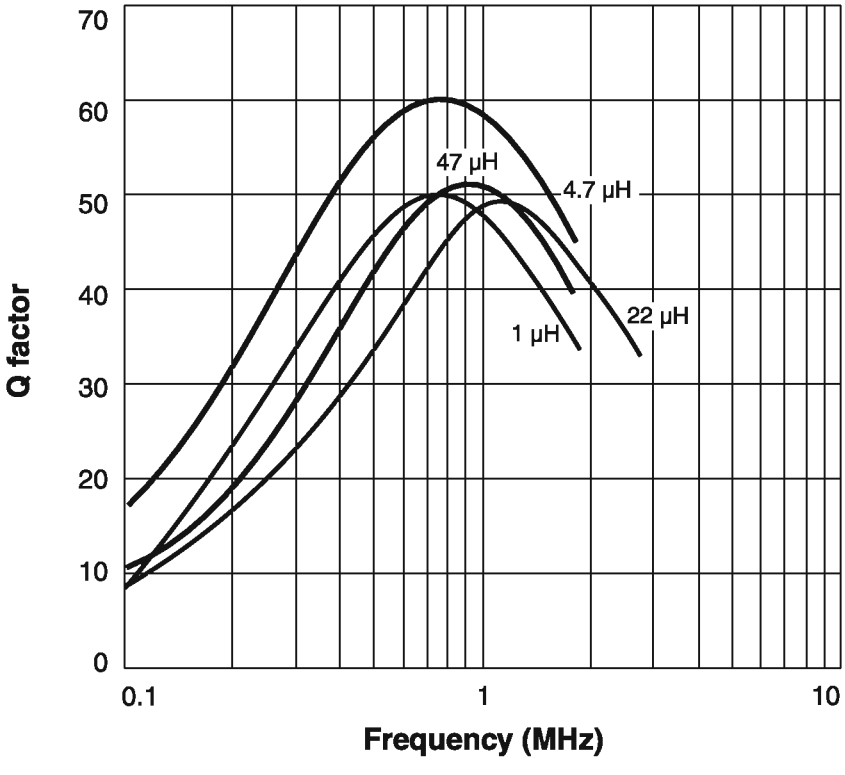


PERFORMANCE CURVE:

Typical L vs Frequency



Typical Q vs Frequency



AUTOMOTIVE SIGNAL COMMON MODE CHOKES

SF4526F SERIES

FEATURES:

- AEC-Q200 compliant,Grade 1
- PPAP ready and supported
- Manufactured in TS/IATF 16949 production lines
- Excellent impedance characteristics

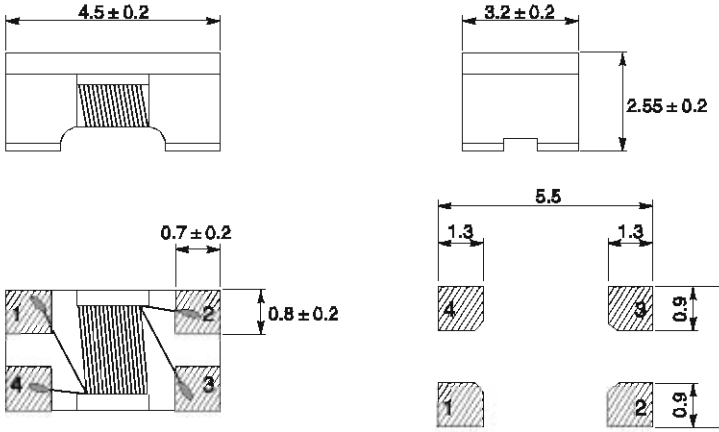
COMMON APPLICATIONS:

- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU
- Automotive Ethernet

ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (uH)+50%/-30% 100KHz	Rated current (A)	DCR (mΩ).	Rated voltage (Vdc)	Insulation Resistance (MΩ) Min
SF4526F-110Y	11	0.36	500	50	10
SF4526F-220Y	22	0.31	800	50	10
SF4526F-510Y	51	0.23	1000	50	10
SF4526F-101Y	100	0.20	2000	50	10

PHYSICAL CHARACTERISTICS:



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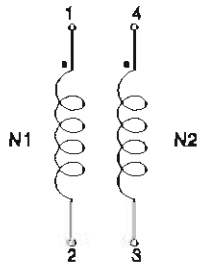


GENERAL SPECIFICATIONS:

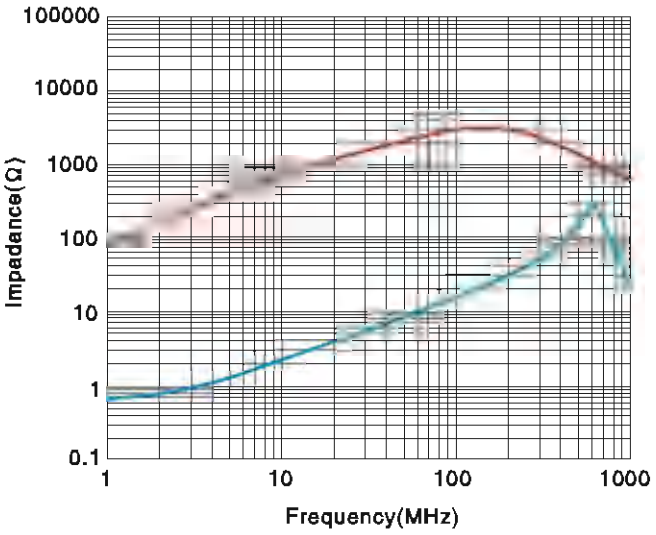
- Rated Current is based on an Irms temperature rise of 20 ℃
- Inductance Test Conditions: 0.1V, 100KHz
- SF4526F Series is AEC-Q200 Automotive certified
- SF4526F Series is RoHS Compliant and Pb free
- Operating Temperature: -40 ℃ to +150 ℃ (Temperature rise included)
- Storage Temperature(on PCB): -40 ℃ to +150 ℃
- Storage (in original packaging): <40 ℃ , <70% RH
- Peckageing: Tape & Reel is standard (Qty: 500PCS)

Note:All specifications subject to change without notice.

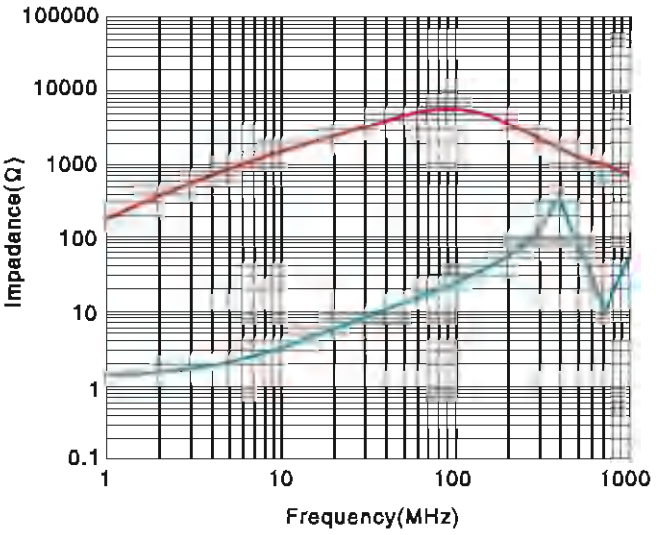
AUTOMOTIVE SIGNAL COMMON MODE CHOKES
SF4526F SERIES

FREQUENCY VS IMPEDANCE

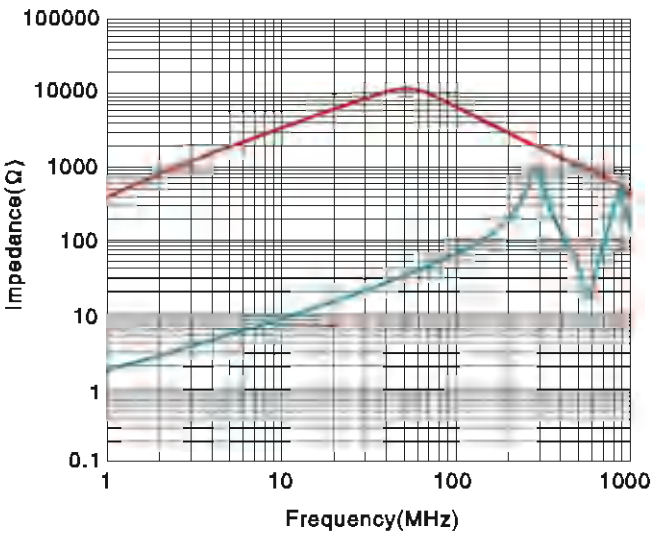
SF4526F-110Y



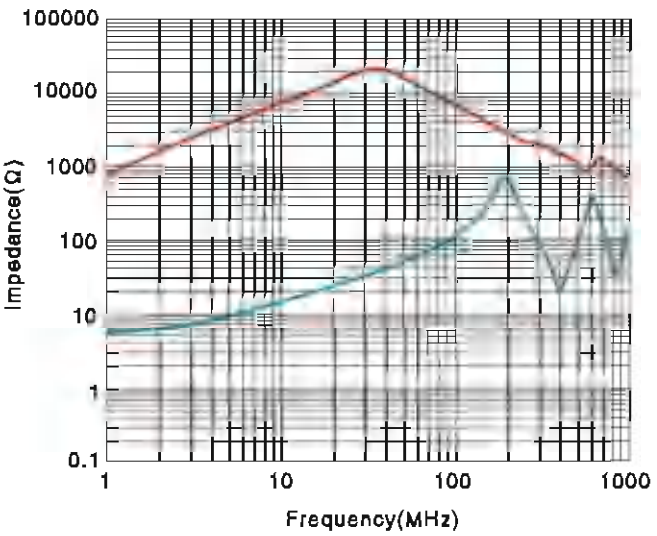
SF4526F-220Y



SF4526F-510Y



SF4526F-101Y



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AUTOMOTIVE SIGNAL COMMON MODE CHOKES

SF4528F SERIES

FEATURES:

- AEC–Q200 compliant
- PPAP ready and supported
- Manufactured in TS/IATF 16949 production lines
- Excellent impedance characteristics

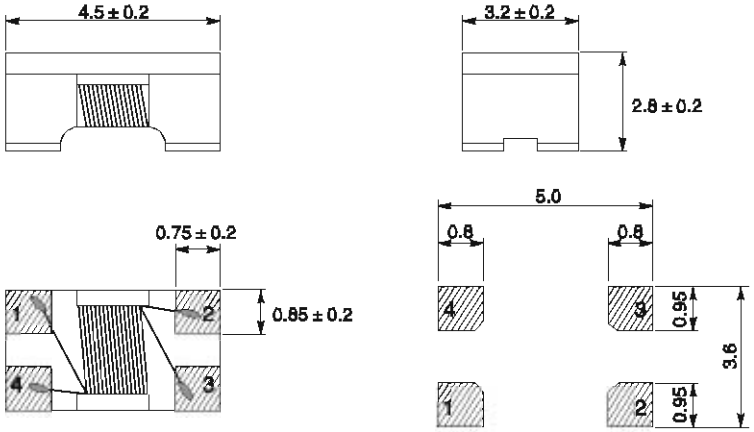
COMMON APPLICATIONS:

- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU
- Automotive Ethernet

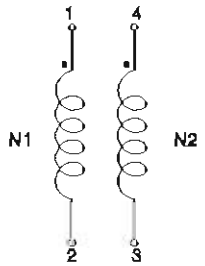
ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (uH)±50%/–30% 100KHz	Impedance Z(Ω)@10MHz		Rated current (A)	DCR (mΩ).	Rated voltage (Vdc)
		Min	Typ			
SF4528F–110Y	11	300	600	0.36	600	50
SF4528F–220Y	22	500	1200	0.31	1000	50
SF4528F–510Y	51	1000	2800	0.23	1000	50
SF4528F–101Y	100	2000	5800	0.20	2000	50

PHYSICAL CHARACTERISTICS:



WINDING:



GENERAL SPECIFICATIONS:

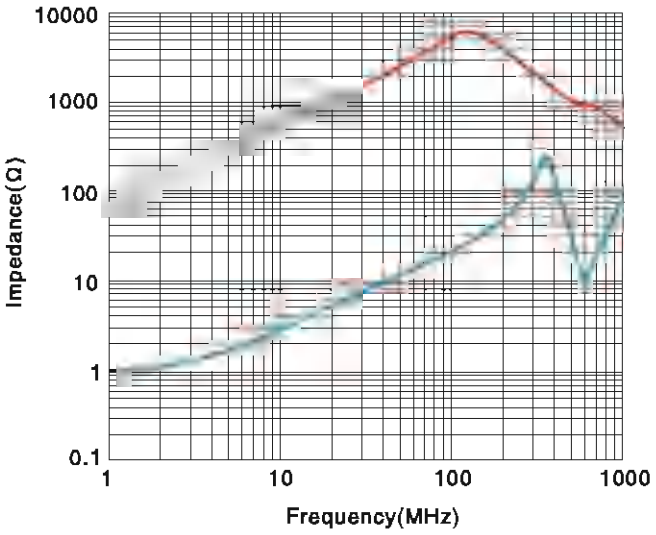
- Rated Current is based on an Irms temperature rise of 40 ℃
- Inductance Test Conditions: 0.1V, 100KHz
- SF4528F Series is AEC–Q200 Automotive certified
- SF4528F Series is RoHS Compliant and Pb free
- Operating Temperature: –55 ℃ to +150 ℃ (Temperature rise included)
- Storage Temperature(on PCB): –55 ℃ to +150 ℃
- Storage (in original packaging): <40 ℃ , <60% RH
- Peckageing: Tape & Reel is standard (Qty: 500PCS)

Note:All specifications subject to change without notice.

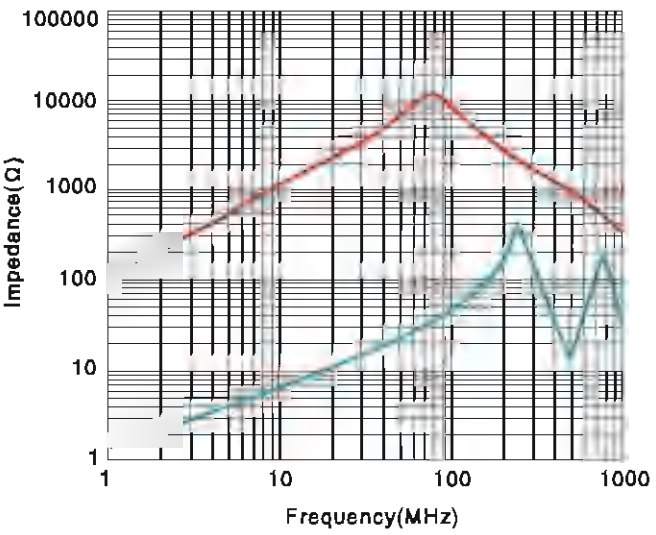
AUTOMOTIVE SIGNAL COMMON MODE CHOKES
SF4528F SERIES

FREQUENCY VS IMPEDANCE

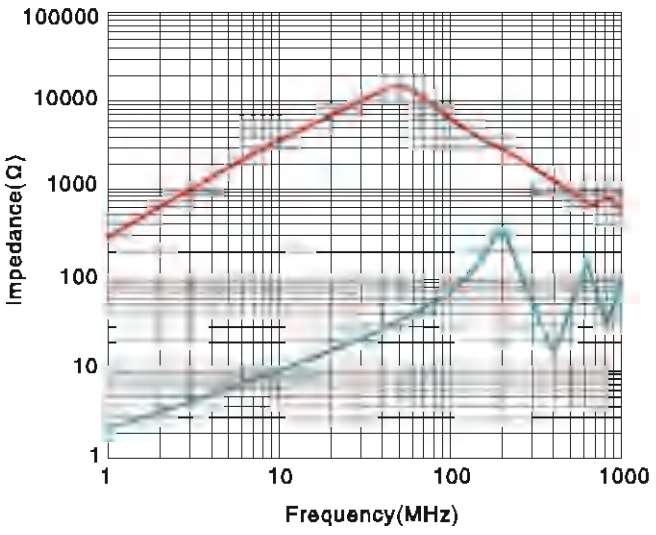
SF4528F-110Y



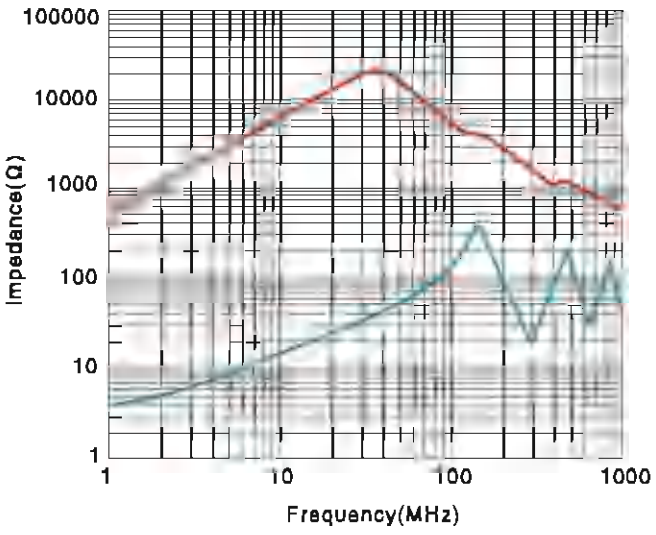
SF4528F-220Y



SF4528F-510Y



SF4528F-101Y



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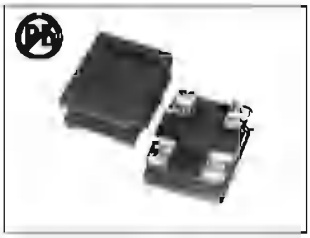


SMD WIRE WOUND COMMON MODE FILTER

SF5045 SERIES

FEATURES:

- High common mode impedance at high frequency effects excellent noise suppression performance.

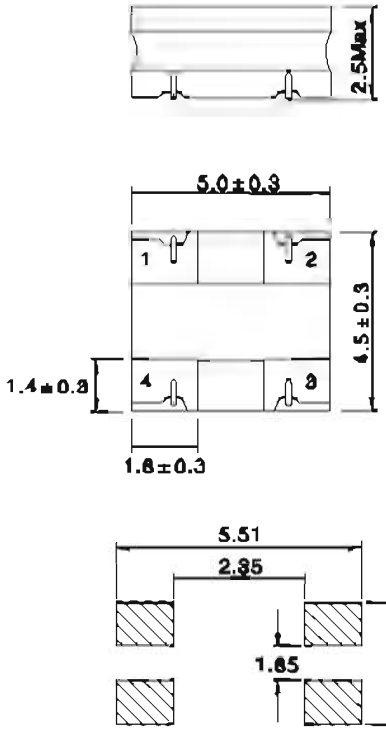
APPLCATIONS:

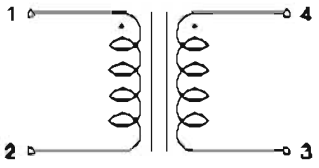
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

ELECTRICAL CHARACTERISTICS:

Part Number	Impedance (Ω)typ.	Test frequency (MHz)	DCR (mΩ) Max	Rated Current (A) Max	Rated Voltage (V)	Insulation resistance (Min)
SF5045-101	100	100	9	6	50	10MΩ
SF5045-251	250	100	14	5	50	10MΩ
SF5045-501	500	100	19	4	50	10MΩ
SF5045-102	1000	100	24	3	50	10MΩ
SF5045-142	1400	100	40	1.5	50	10MΩ

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- Inductance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: -40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

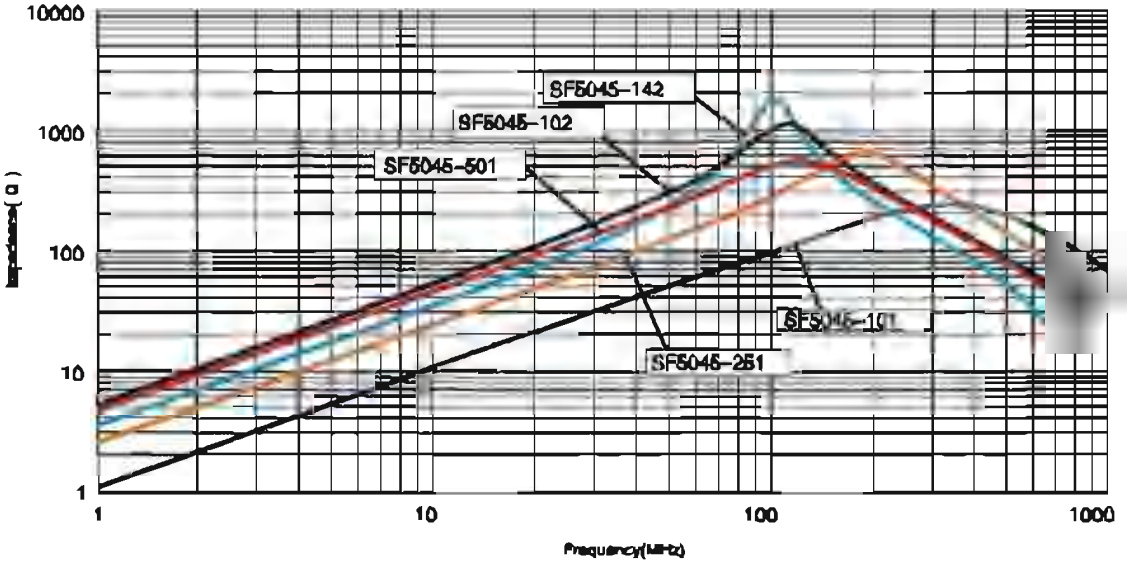
Note:All specifications subject to change without notice.

SMD WIRE WOUND COMMON MODE FILTER

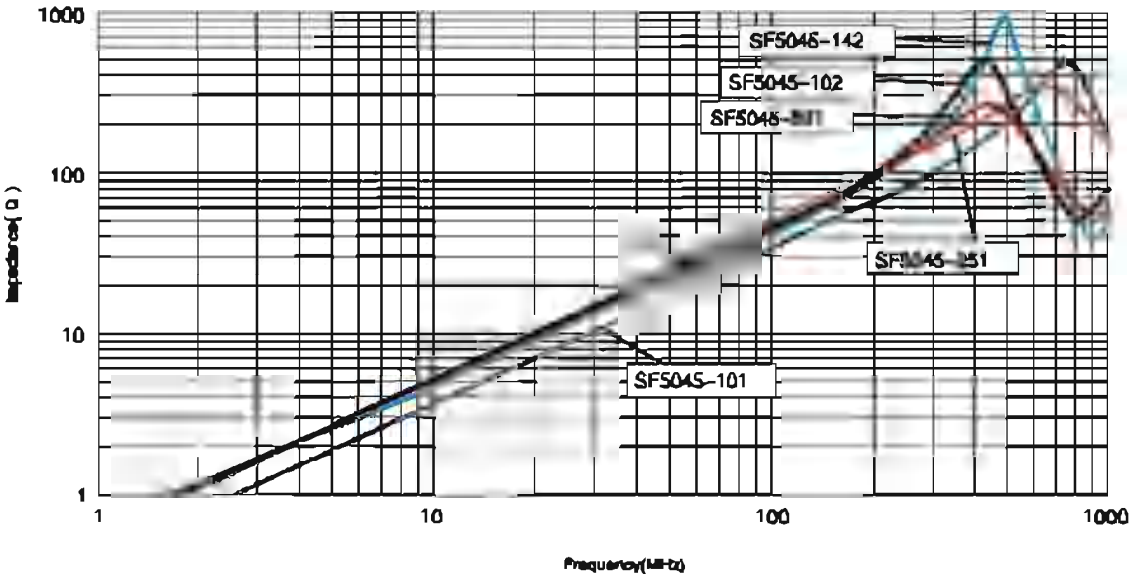
SF5045 SERIES

IMPEDANCE FREQUENCY:

Common Mode



Differential Mode



AUTOMOTIVE SIGNAL COMMON MODE CHOKES

SF6527F SERIES

FEATURES:

- AEC–Q200 compliant,Grade 1
- PPAP ready and supported
- Manufactured in TS/IATF 16949 production lines
- Excellent impedance characteristics

COMMON APPLICATIONS:

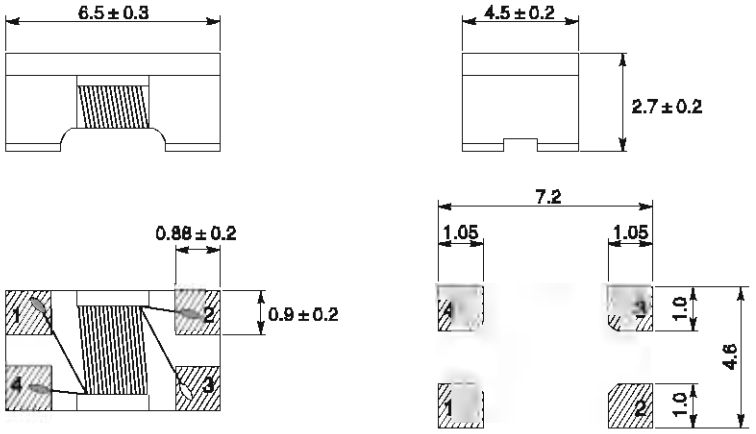
- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU
- Automotive Ethernet

ELECTRICAL CHARACTERISTICS:@25℃

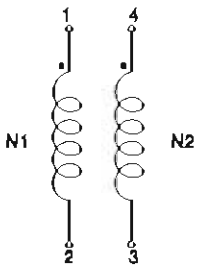
Part Number	Inductance (uH)+50%/–30% 100KHz	Rated current (A)	DCR (mΩ).	Return loss(dB) Min		
				1–10MHz	30MHz	60MHz
SF6527F–101Y	100	0.35	2000	–28	–23	–18

Insertion loss(dB) Max		Common mode Rejection(dB) Min				Differential to common mode Rejection (dB) Min		
1–60MHz	100MHz	1MHz	10MHz	60–100MHz	200–1000MHz	1–10MHz	100MHz	1000MHz
–1.0	–3.0	–18	–35	–43	–30	–70	–50	–25

PHYSICAL CHARACTERISTICS:



WINDING:



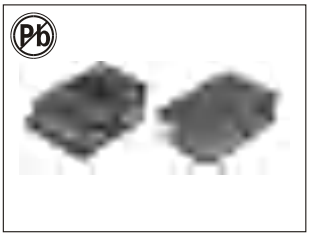
GENERAL SPECIFICATIONS:

- Rated Current is based on an Irms temperature rise of 40 ℃
- Inductance Test Conditions: 0.1V, 100KHz
- SF6527F Series is AEC–Q200 Automotive certified
- SF6527F Series is RoHS Compliant and Pb free
- Operating Temperature: –40 ℃ to +125 ℃ (Temperature rise included)
- Storage Temperature(on PCB): –40 ℃ to +125 ℃
- Storage (in original packaging): <40 ℃ , <60% RH

Note:All specifications subject to change without notice.

SURFACE–MOUNT COMMON MODE CHOKES

SQD 32T,45T SERIES



FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

OPTIONS:

- Packaging:Tape & Reel is standard (Qty:2000pcs)
  Bulk packaging available for smaller quantities
- Tolerance:20% is standard, tighter tolerances available

COMMON APPLCATIONS:

- DC/DCAC/DC convertor
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

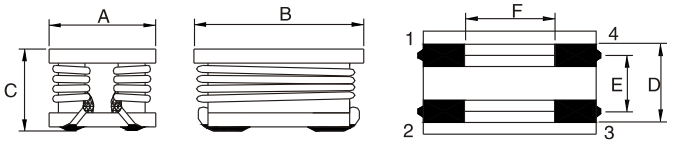
ELECTRICAL CHARACTERISTICS:

Part Number	Common Mode Impedance@100MHz (Ω)Typical	IDC (A)Max	DCR (mΩ)Max
SQD32T01–800	80	0.6	0.08
SQD32T01–121	120	0.6	0.1
SQD32T01–221	220	0.5	0.12
SQD32T02–800	80	0.6	0.08
SQD32T02–121	120	0.6	0.1
SQD32T02–221	220	0.5	0.12
SQD45T01–121	120	1.0	0.05
SQD45T01–331	330	1.0	0.08
SQD45T01–701	700	0.8	0.1
SQD45T02–121	120	1.0	0.05
SQD45T02–331	330	1.0	0.08
SQD45T02–701	700	0.8	0.1

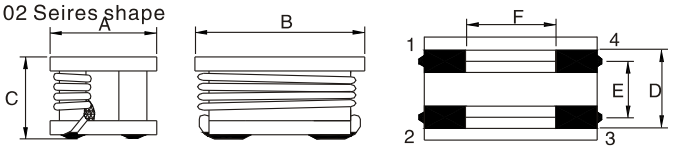
Note:1. K=±10%,M=±20%,N=±30%

PHYSICAL CHARACTERISTICS:

01 Seires shape

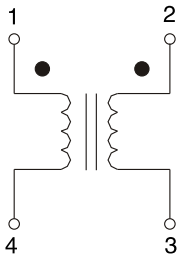


02 Seires shape



Type	A	B	C	D	E	F
SQD32T	3.2±0.3	2.5±0.3	2.2±0.3	1.6	0.6	1.2
SQD45T	4.5±0.3	3.2±0.3	3.2±0.3	2.5	1.2	1.5

WINDING:



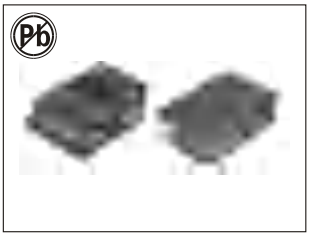
- Z test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: –40℃ to +105℃
- Storage Temperature: –40℃℃ to +105℃℃
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086–29–87851838 Fax:0086–29–87851840

SURFACE–MOUNT COMMON MODE CHOKES

SQD 55T,60T,80T,85T,100T SERIES



FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

OPTIONS:

- Packaging:Tape & Reel is standard (Qty:2000pcs)
  Bulk packaging available for smaller quantities
- Tolerance:20% is standard, tighter tolerances available

COMMON APPLCATIONS:

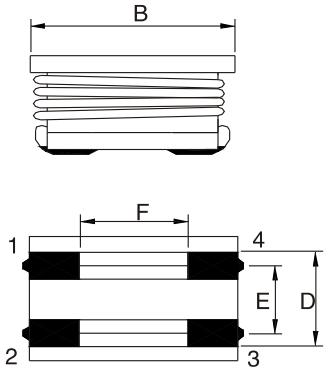
- DC/DCAC/DC convertor
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

ELECTRICAL CHARACTERISTICS:

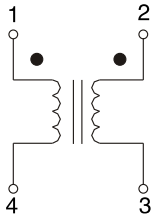
Part Number	Common Mode Impedance (Ω)Typical			IDC (A)Max	DCR (mΩ)Max
	1MHz	50MHz	100MHz		
SQD55T–151	15.0	100.0	150.0	2.0	60.0
SQD55T–351	50.0	350.0	350.0	2.0	70.0
SQD60T–601	70.0	500.0	600.0	2.0	45.0
SQD60T–701	75.0	600.0	700.0	2.0	50.0
SQD80T–701	20.0	400.0	700.0	4.0	40.0
SQD80T–901	40.0	600.0	900.0	4.0	45.0
SQD85T–203	50.0	2200.0	2000.0	2.5	75.0
SQD100T–801	80.0	850.0	800.0	5.0	25.0
SQD100T–102	90.0	900.0	1000.0	5.0	35.0
SQD100T–122	150.0	1100.0	1200.0	5.0	45.0

Note:1. K= ± 10%,M= ± 20%,N= ± 30%

PHYSICAL CHARACTERISTICS:



WINDING:



Type	A	B	C	D	E	F
SQD55T	5.5 ± 0.3	4.6 ± 0.3	1.6 ± 0.3	4.6	2.7	2.2
SQD60T	6.0 ± 0.3	7.5 ± 0.3	3.2 ± 0.3	7.5	2.0	1.8
SQD80T	8.0 ± 0.3	10.0 ± 0.3	5.0 ± 0.3	10.0	4.0	2.5
SQD85T	8.5 ± 0.3	5.0 ± 0.3	5.0 ± 0.3	5.0	1.8	4.0
SQD100T	10.0 ± 0.3	12.0 ± 0.3	6.0 ± 0.3	12.0	4.8	3.5

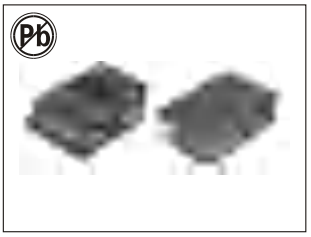
- Z test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: –40℃ to +105℃
- Storage Temperature: –40℃℃ to +105℃℃
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086–29–87851838 Fax:0086–29–87851840

SURFACE-MOUNT COMMON MODE CHOKES

SQD 75T,83T,105T,125T SERIES



FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

OPTIONS:

- Packaging:Tape & Reel is standard (Qty:2000pcs)
  Bulk packaging available for smaller quantities
- Tolerance:20% is standard, tighter tolerances available

COMMON APPLCATIONS:

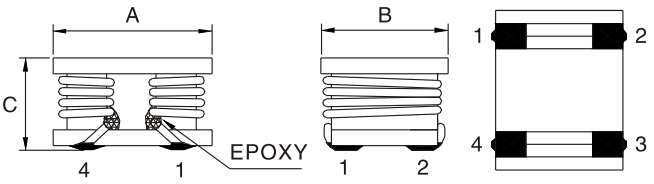
- DC/DCAC/DC convertor
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

ELECTRICAL CHARACTERISTICS:

Part Number	Common Mode Impedance@100MHz (Ω)Typical	IDC (A)Max	DCR (mΩ)Max
SQD75T-601	600	4.0	15
SQD75T-102	1000	3.0	17
SQD75T-122	1200	3.0	25
SQD75T-152	1500	2.0	40
SQD83T-501	500	3.0	18
SQD83T-801	800	2.0	28
SQD83T-102	1000	1.5	58
SQD105T-401	400	7.0	5
SQD105T-751	750	5.0	10
SQD105T-102	1000	4.0	15
SQD125T-901	900	10.0	10
SQD125T-102	1000	7.0	15
SQD125T-122	1200	5.0	25

Note:1. K=±10%,M=±20%,N=±30%

TECHNICAL INFORMATION:

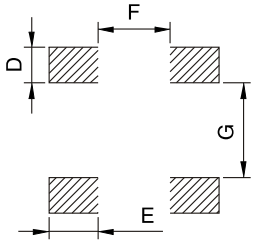


- Inductance Testing: 1KHz 1V HP4284A
- Z test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: -40℃ to +105℃
- Storage Temperature: -40℃℃ to +105℃℃
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number and date code

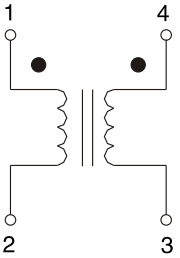
Note:All specifications subject to change without notice.

PHYSICAL CHARACTERISTICS:

LAND PATTERNS



DIMENSIONS IN:mm

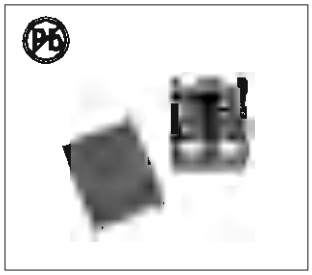


Type	A	B	C	D	E	F	G
SQD75T	7.5±0.3	8.8±0.3	5.0±0.3	2.0	2.8	2.6	1.4
SQD83T	8.0 Max	6.5 Max	3.5 Max	2.0	2.0	2.0	2.6
SQD105T	10.5 Max	8.5 Max	5.5 Max	2.1	2.4	2.9	3.9
SQD125T	12.0±0.3	10.0±0.3	4.5±0.3	2.6	3.0	3.0	4.4

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

SQD 1211 SERIES



FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechenical Strength
- Excellent Solderebility
- Excellent Frequency performance
- Low Profile and Low cost

APPLCATIONS:

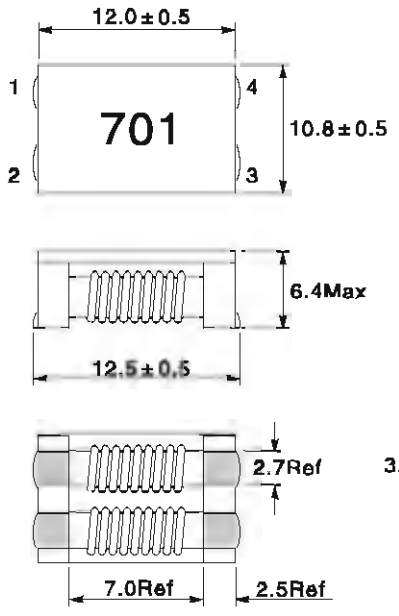
- DC/DCAC/DC convertor
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems

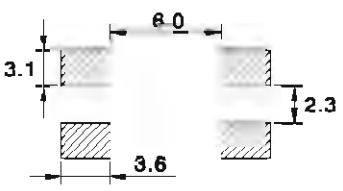
ELECTRICAL CHARACTERISTICS:

Part Number	Impedance@100MHz		DCR (mΩ)Max	IDC (A)Max
	(Ω)Min	(Ω)Typ		
SQD1211-800	80	230	2.0	10.0
SQD1211-701	500	700	6.0	8.0
SQD1211-801	600	800	8.0	8.0
SQD1211-102	750	1000	14.0	6.0
SQD1211-222	2200	2500	35.0	1.8
SQD1211-272	2300	2700	50.0	1.5

PHYSICAL CHARACTERISTICS:

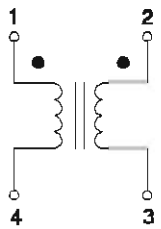
DIMENSIONS IN:mm





LAND PATTERNS

WINDING:

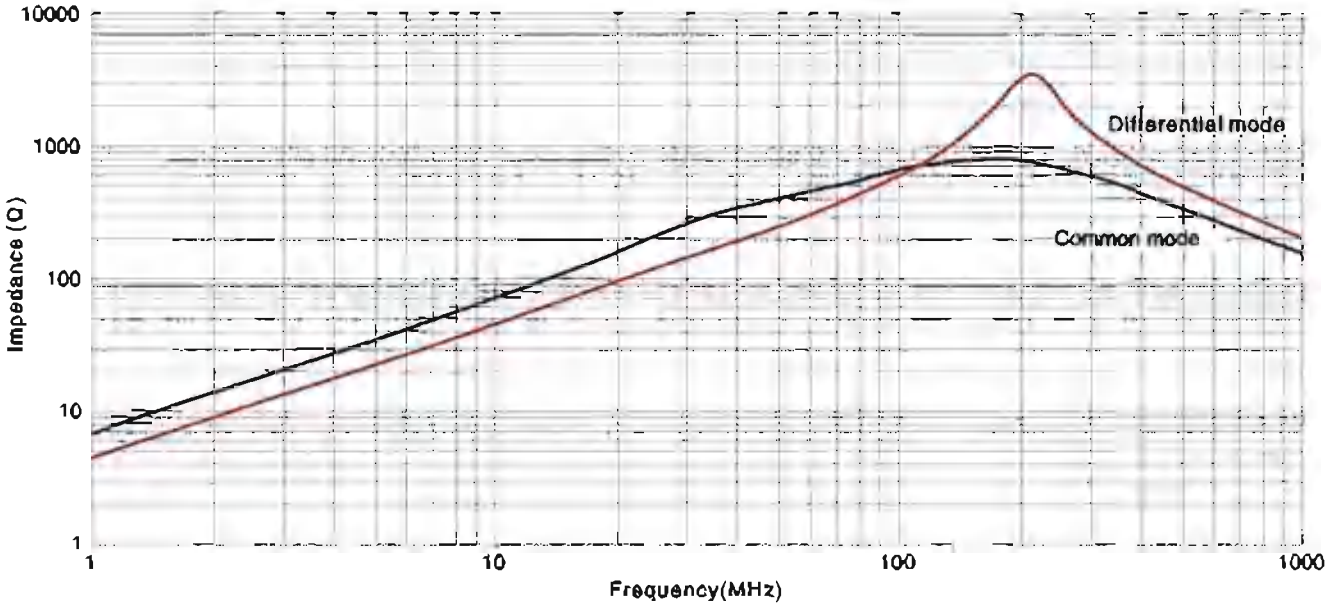


- Impedance test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Rated voltage: 125V Max
- Insulation resistance: 10MΩ Min
- Operating temperature: -40℃ to +125℃
- Storage Temperature: -40℃ to +125℃
- Packing: 500Pcs/Reel/Bag
  1000Pcs/Box
  5000Pcs/Carton

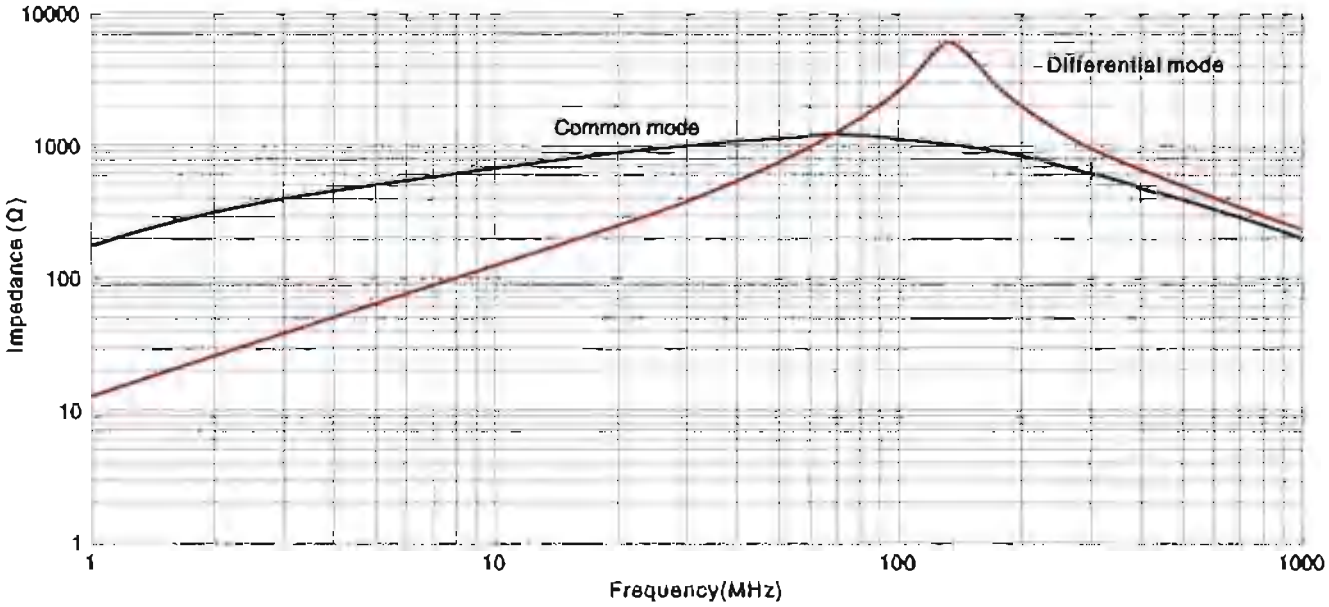
SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

SQD1211-701



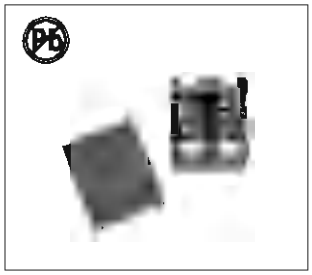
SQD1211-102



SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

SQD 1513 SERIES



FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechenical Strength
- Excellent Solderebility
- Excellent Frequency performance
- Low Profile and Low cost

APPLCATIONS:

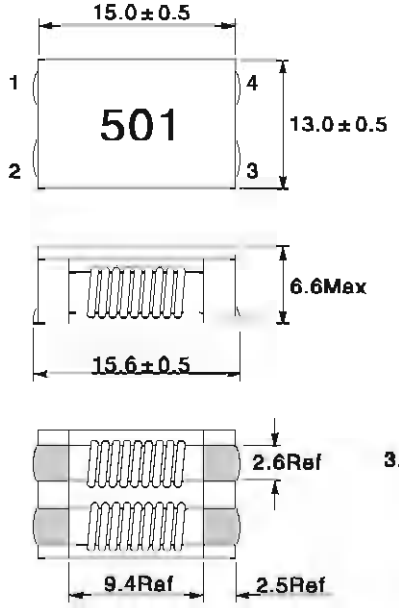
- DC/DCAC/DC convertor
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems

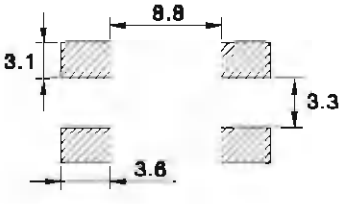
ELECTRICAL CHARACTERISTICS:

Part Number	Impedance@100MHz		DCR (mΩ)Max	IDC (A)Max
	(Ω)Min	(Ω)Typ		
SQD1513-301H	225	300	4.0	15.0
SQD1513-301	225	300	5.0	13.0
SQD1513-551H	400	550	5.0	12.0
SQD1513-551	400	550	6.0	10.0
SQD1513-501	400	500	6.0	10.0
SQD1513-601	500	600	7.0	10.0
SQD1513-701	500	700	7.0	10.0
SQD1513-102	800	1000	10.0	9.0
SQD1513-152	1200	1500	23.0	5.0

PHYSICAL CHARACTERISTICS:

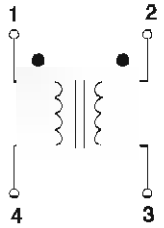
DIMENSIONS IN:mm





LAND PATTERNS

WINDING:

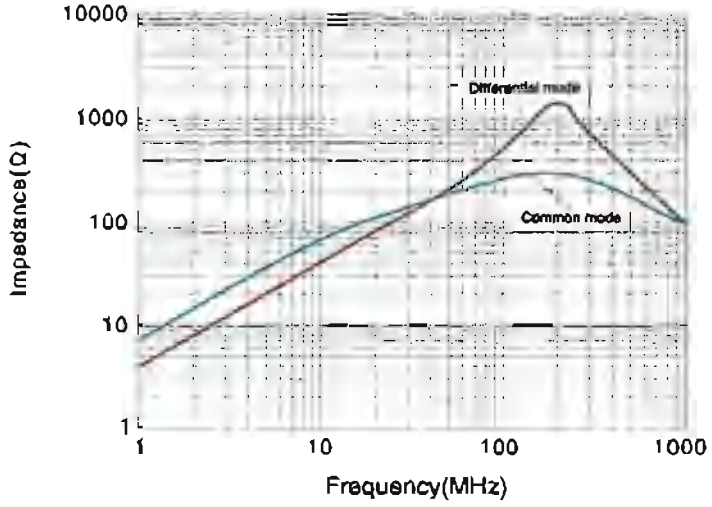


- Impedance test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Rated voltage: 80V Max
- Insulation resistance: 10MΩ Min
- Operating temperature: -40℃ to +125℃
- Storage Temperature: -40℃ to +125℃
- Packing: 350Pcs/Reel
  700Pcs/Bag/Box
  3500Pcs/Carton

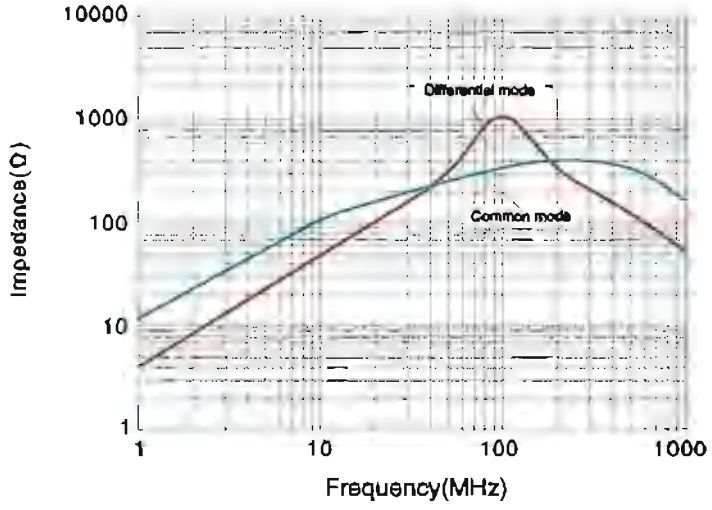
SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

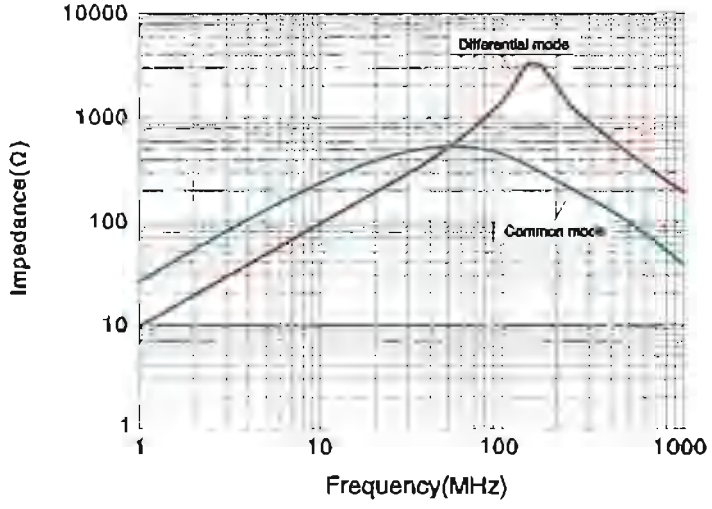
SQD1513-301H



SQD1513-301



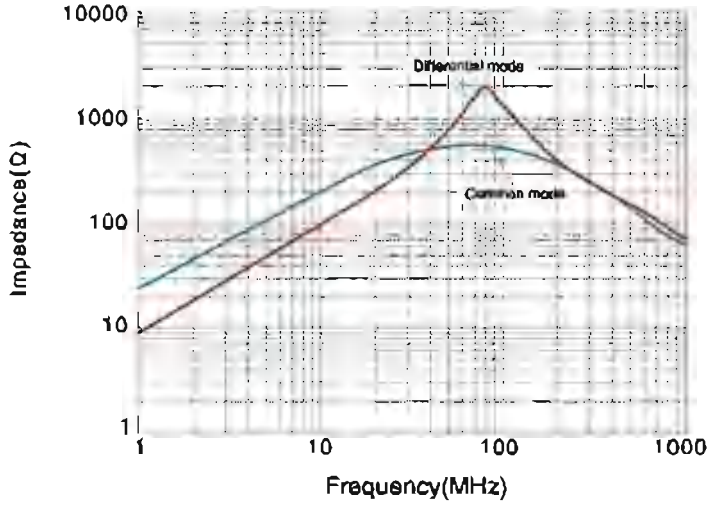
SQD1513-551H



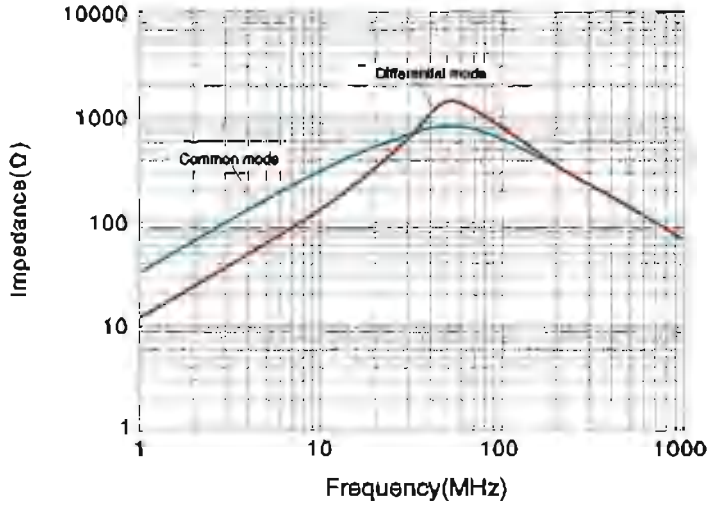
SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

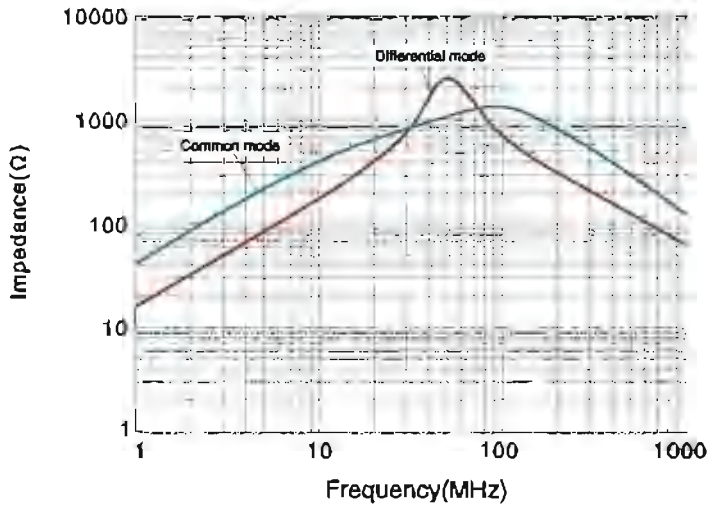
SQD1513-551



SQD1513-701



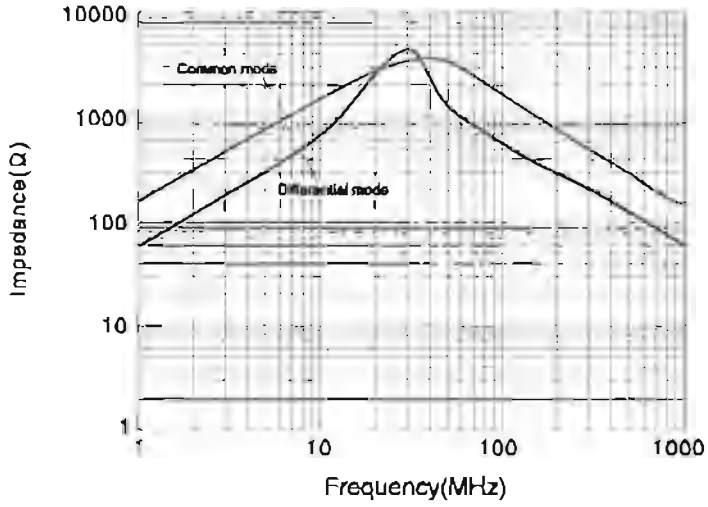
SQD1513-102



SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SURFACE-MOUNT COMMON MODE CHOKES

SQD1513-152



SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

COMMON MODE CHOKE COILS FOR DC POWER LINE

SQD 3225, 4532 SERIES

FEATURES:

- A chip-type common mode filter for large current applications. Common mode impedance surpasses 300 to 1000Ω at 100MHz. Noise is greatly suppressed.
- Capable of handling the highest current (up to 10A) of any chip-type common mode filter.
- Height and size have been considered, resulting in a compact and light-weight choke coil. Applicable for the miniaturization required to reduce the size and weight of portable equipment.
- The products contain no lead and also support lead-free soldering.
- This product does not contain regulated substances that are stated to be included in RoHS.

APPLCATIONS:

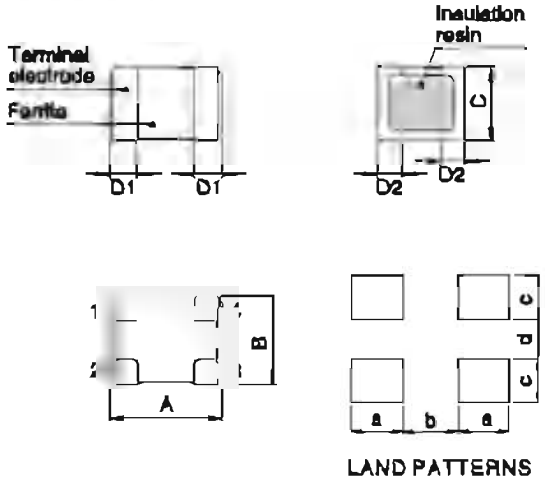
- Used for power line noise suppression for any electronic devices. Used to counter adapter/battery line noise for relatively large elec-tronic devices such as notebook PCs, stand-alone word proces-sors, etc.

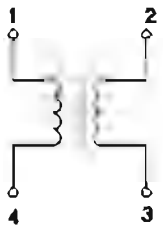
ELECTRICAL CHARACTERISTICS:

Part Number	Impedance @ 100MHz (Common mode test)		DCR (mΩ)Max	Rated current (A)Max	Rated voltage (VDC)Max	Insulation resistance (MΩ)Min
	(Ω)Min	(Ω)Typ				
SQD3225-601	450	600	200	1.0	50	10
SQD4532-601	450	600	100	1.5	50	10
SQD4532-801	600	800	100	1.0	50	10

PHYSICAL CHARACTERISTICS: WINDING:

DIMENSIONS IN:mm





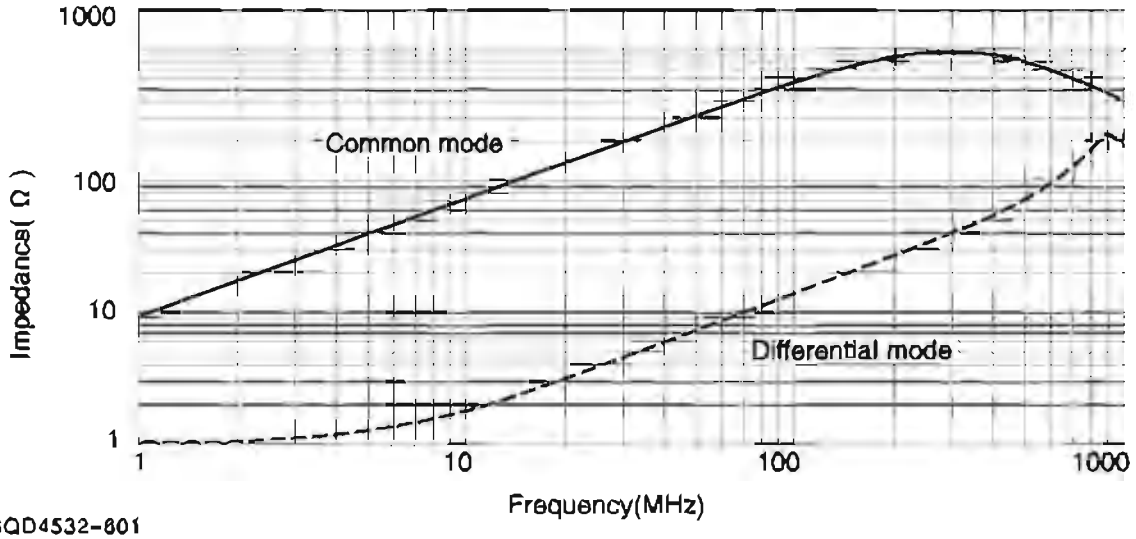
LAND PATTERNS

	A	B	C	D1	D2	a	b	c	d
SQD3225	3.2±0.2	2.5±0.2	2.3Max	0.7	0.85	1.5	1.6	1.4	1.1
SQD4532	4.5±0.2	3.2±0.2	3.0Max	1	1	1.8	2.3	1.75	1.1

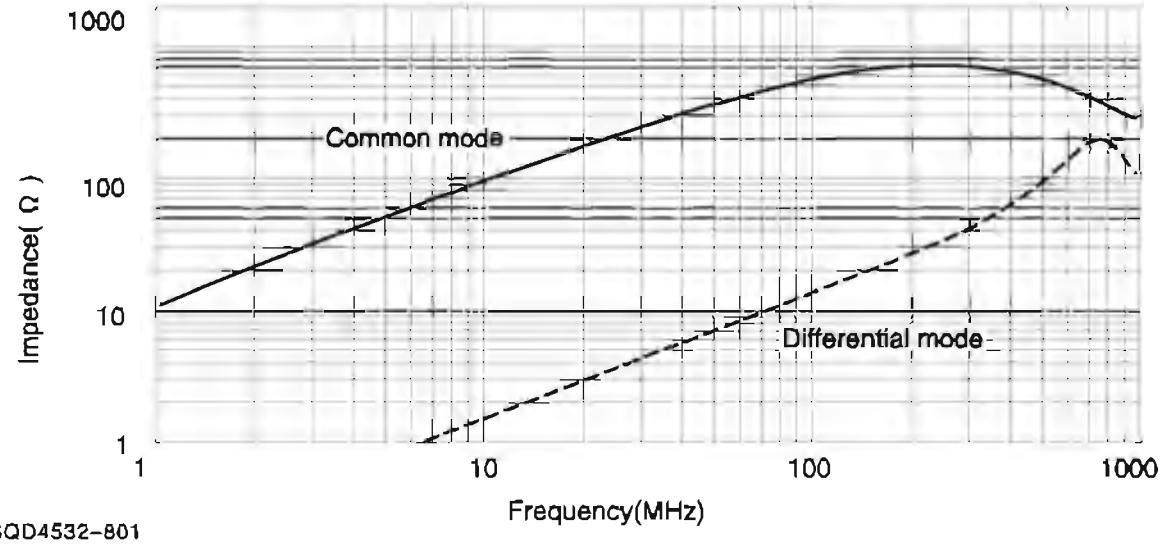
- Impedance test with HP4191A or HP4395A
- RDC:QuadTech 1650 Milliohmmeter
- Insulation resistance: 10MΩ Min
- Operating temperature: -40℃ to +125℃
- Storage Temperature: -40℃ to +125℃
- Packing: SQD3225: ϕ 180mm, 1000Pcs/Reel
  ϕ 330mm, 5000Pcs/Reel
  SQD4532: ϕ 180mm, 500Pcs/Reel
  ϕ 330mm, 2000Pcs/Reel

COMMON MODE CHOKE COILS FOR DC POWER LINE

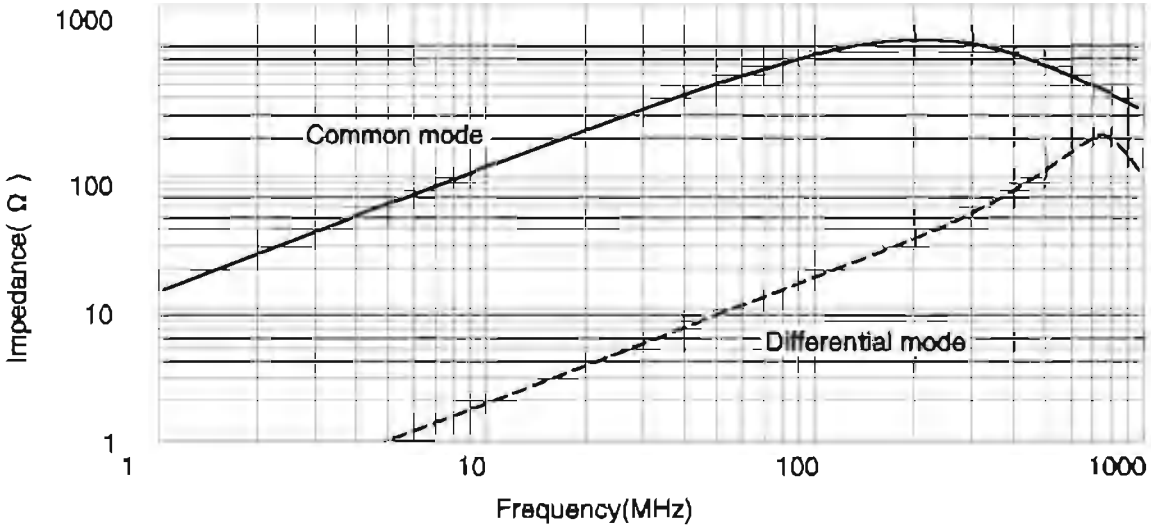
SQD3225-601



SQD4532-601

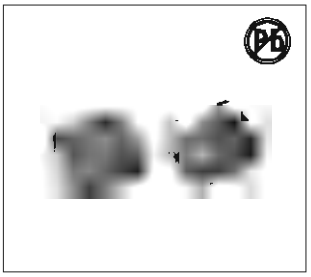


SQD4532-601



SURFACE-MOUNT COMMON MODE CHOKES

SQD 7060, 9070 SERIES



FEATURES:

- Chip common mode filter for large current applications. There is excellent common mode impedance and noise suppression in a compact case
- Compatible with high-density portable devices, which are always being made smaller and lighter, because the height has been reduced.

APPLCATIONS:

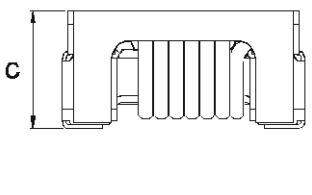
- Power line noise countermeasure for various electronic equipment.
- Noise countermeasure for adapter lines and battery lines or larger electronic equipment such as note book PCs and word processors.

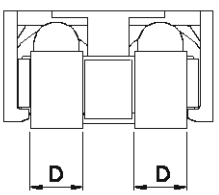
ELECTRICAL CHARACTERISTICS:

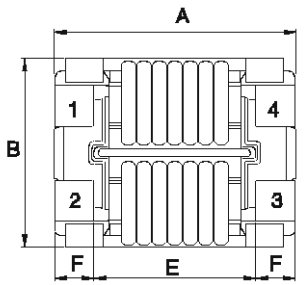
Part Number	Impedance@100MHz (Common mode test)		DCR (1 line) (mΩ)Max	Rated current (A)Max	Rated voltage (VDC)Max	Insulation resistance (MΩ)Min
	(Ω)Min	(Ω)Typ				
SQD7060-400	40	70	5	15	125	10
SQD7060-101	100	140	10	9	125	10
SQD7060-301	225	300	10	5	125	10
SQD7060-701	500	700	15	4	125	10
SQD7060-102	800	1020	17	3	125	10
SQD7060-132	910	1300	21	2.5	125	10
SQD9070-301	225	300	6	6	80	10
SQD9070-601	450	600	8	6	80	10
SQD9070-701	500	700	10	5	80	10
SQD9070-102	750	1000	13	4	80	10
SQD9070-272	2000	2700	86	2	80	10

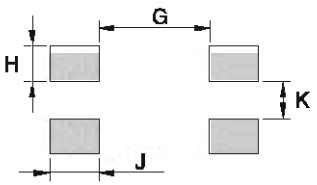
PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm



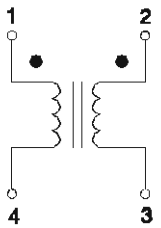






LAND PATTERNS

WINDING:

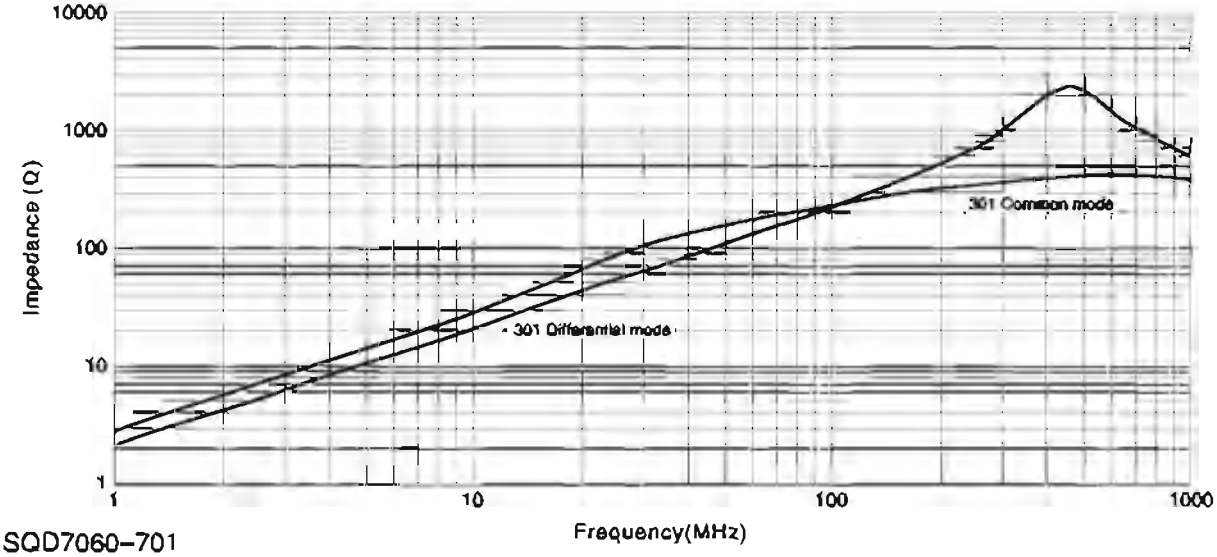


- Impedance test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Insulation resistance: 10MΩ Min
- Operating temperature: -40℃ to +125℃
- Storage Temperature: -40℃ to +125℃
- Packing: 1500Pcs/Reel(SQD7060)
  800Pcs/Reel(SQD9070)

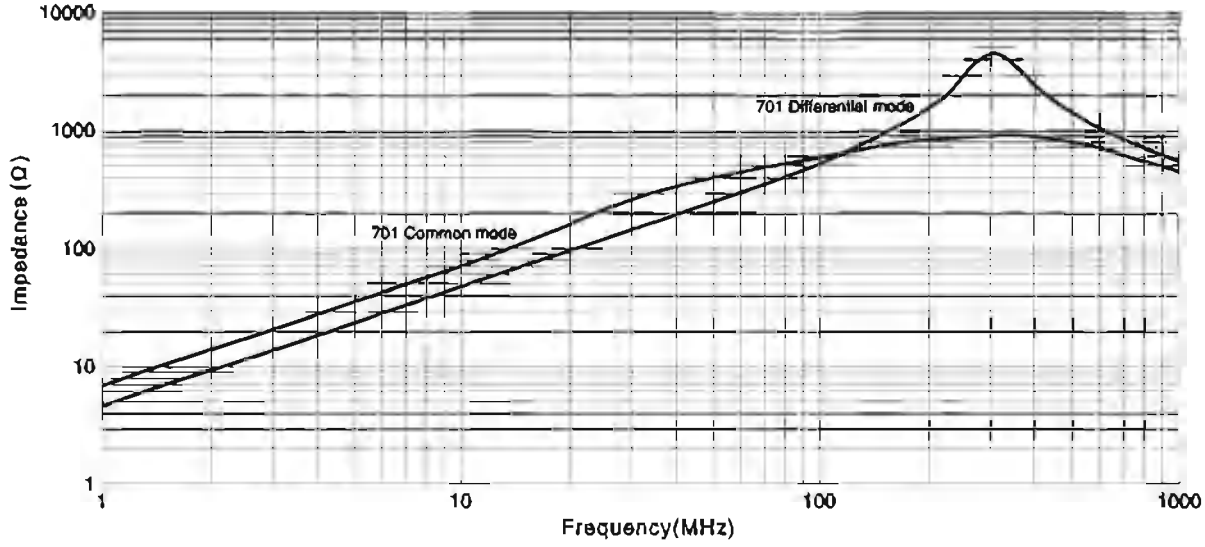
	A	B	C	D	E	F	G	H	J	K
SQD7060	7.0±0.2	6.0±0.2	3.6Max	1.5±0.5	4.0typ	1.5±0.5	4.0	1.5	2.5	1.5
SQD9070	9.0±0.2	7.0±0.2	4.6Max	1.5±0.5	6.0typ	1.5±0.5	6.0	1.5	2.5	2.0

SURFACE-MOUNT COMMON MODE CHOKES

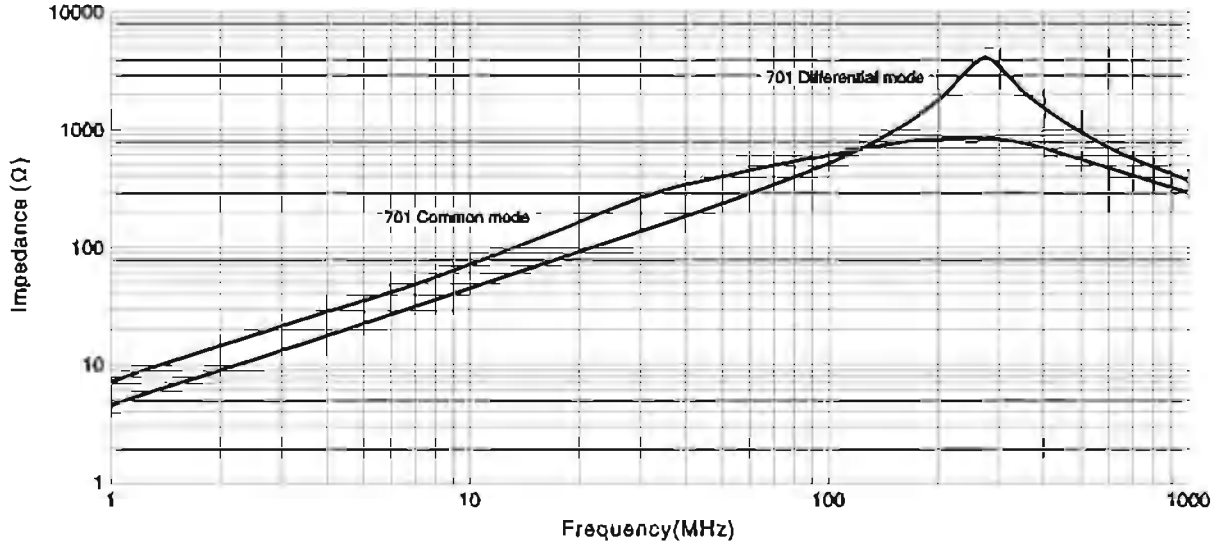
SQD7060-301



SQD7060-701

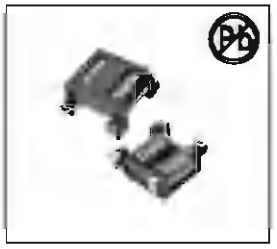


SQD9070-701



SMD HIGH CURRENT FLAT WIRE COMMON MODE CHOKE

SQS1212 SERIES



FEATURES:

- Compact size, low DCR, low leakage due to square core.
- High permeability material, High impedance at low frequency.
- High attenuation to noise, due to low stray capacitance.
- Flammability tested to UL 94 V–0.
- Low cost, high consistency with automated production.
- RoHS, REACH compliance, Halogen free available.

APPLICATIONS:

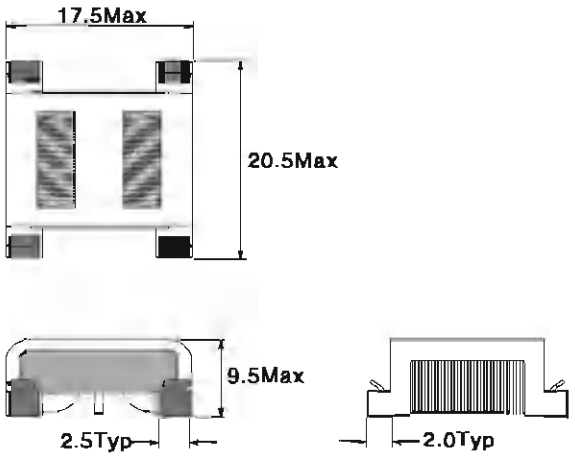
- Solutions for use in a wide array of power supply circuits.
- High dealty switching mode power supply devices.
- Ideal for use in consumer electronics and industrial applications: LCD TV, Battery chargers, Power Adapter, Home appliances.
- Space saving for existing Common Mode Chokes.

ELECTRICAL CHARACTERISTICS:

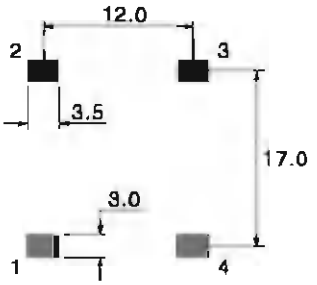
Part Number	Inductance (mH)Min	Common mode peak impedance (kΩ)	Leakage inductance (uH)Max	DCR (mΩ) Max	Rated current (A)Max
SQS1212–801Y	0.8	9.06@3.73MHz	80	25	3.6
SQS1212–102Y	1.0	14.12@2.9MHz	100	36	3.0
SQS1212–152Y	1.5	22.67@2.15MHz	115	52	2.5
SQS1212–252Y	2.5	31.51@2.48MHz	130	95	1.8
SQS1212–302Y	3.0	44.31@2.31MHz	130	115	1.5
SQS1212–362Y	3.6	47.1@1.96MHz	140	158	1.2
SQS1212–502Y	5.0	66.55@1.84MHz	150	216	1.0
SQS1212–682Y	6.8	81.25@1.32MHz	180	315	0.8
SQS1212–952Y	9.5	123.34@0.95MHz	210	500	0.6

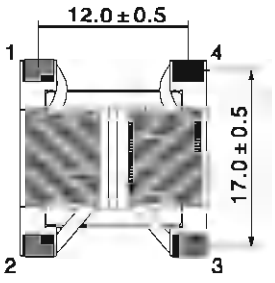
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm



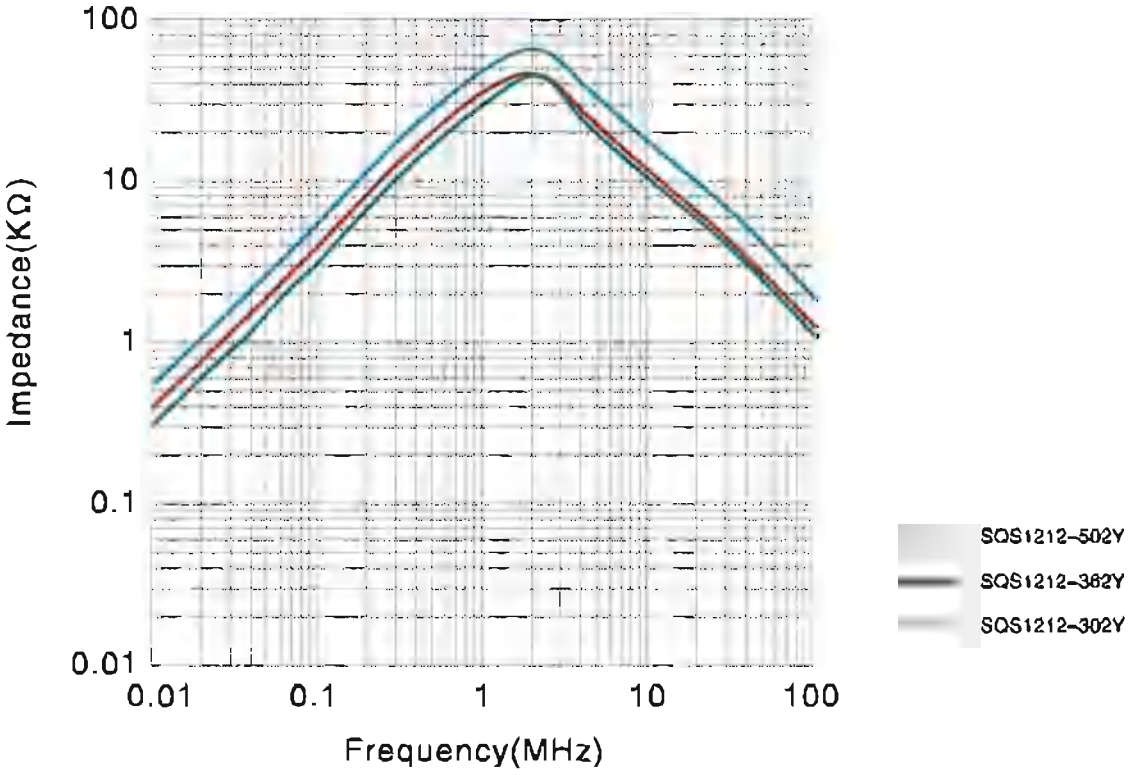
LAND PATTERNS

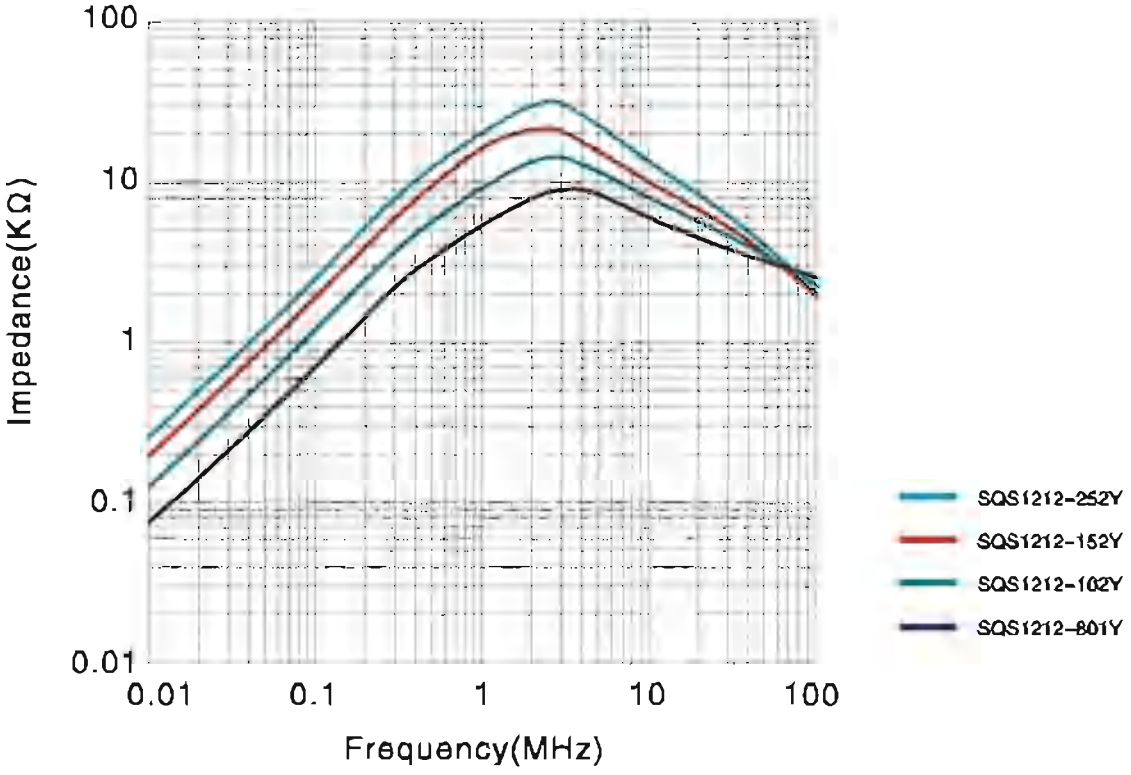




- Inductor Testing: HP4284A (Equivalent acceptable)
  DCR:QuadTech 1880 Milliohmmeter
- Rated voltage: 80VAC– 280VAC
- High withstanding voltage between windings:2400VAC /60 sec.
- High insulation resistance 100MΩ Min@ 500VDC between windings.
- Operating temperature:–40℃–+125℃ (including coil temperature rise).
- Storage temperature:– 40℃– +85℃.
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL–STD–202E

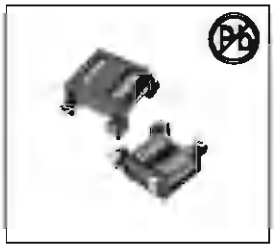
IMPEDANCE VS FREQUENCY:





SMD HIGH CURRENT FLAT WIRE COMMON MODE CHOKE

SQS1212HP SERIES



FEATURES:

- Compact size, low DCR, low leakage due to square core.
- High permeability material, High impedance at low frequency.
- High attenuation to noise, due to low stray capacitance.
- Flammability tested to UL 94 V–0.
- Low cost, high consistency with automated production.
- RoHS, REACH compliance, Halogen free available.

APPLICATIONS:

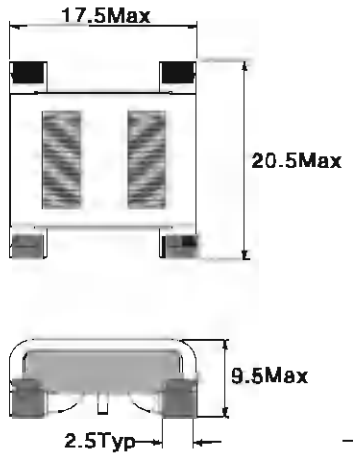
- Solutions for use in a wide array of power supply circuits.
- High dealty switching mode power supply devices.
- Ideal for use in consumer electronics and industrial applications: LCD TV, Battery chargers, Power Adapter, Home appliances.
- Space saving for existing Common Mode Chokes.

ELECTRICAL CHARACTERISTICS:

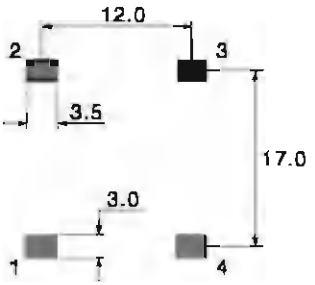
Part Number	Inductance (mH)Min	Common mode peak impedance (kΩ)	Leakage inductance (uH)Max	DCR (mΩ) Max	Rated current (A)Max
SQS1212HP–182Y	1.8	5.98@2.69MHz	120	25	3.6
SQS1212HP–252Y	2.5	7.37@2.56MHz	130	36	3.0
SQS1212HP–362Y	3.6	11.72@2.34MHz	140	52	2.5
SQS1212HP–582Y	5.8	17.69@2.23MHz	160	95	1.8
SQS1212HP–702Y	7.0	19.62@2.15MHz	200	115	1.5
SQS1212HP–852Y	8.5	26.22@2.01MHz	200	158	1.2
SQS1212HP–123Y	12.0	32.44@1.55MHz	230	216	1.0
SQS1212HP–153Y	15.0	39.25@1.15MHz	280	315	0.8
SQS1212HP–223Y	22.0	57.64@0.85MHz	360	500	0.6

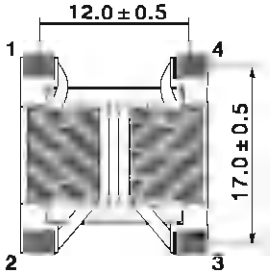
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm



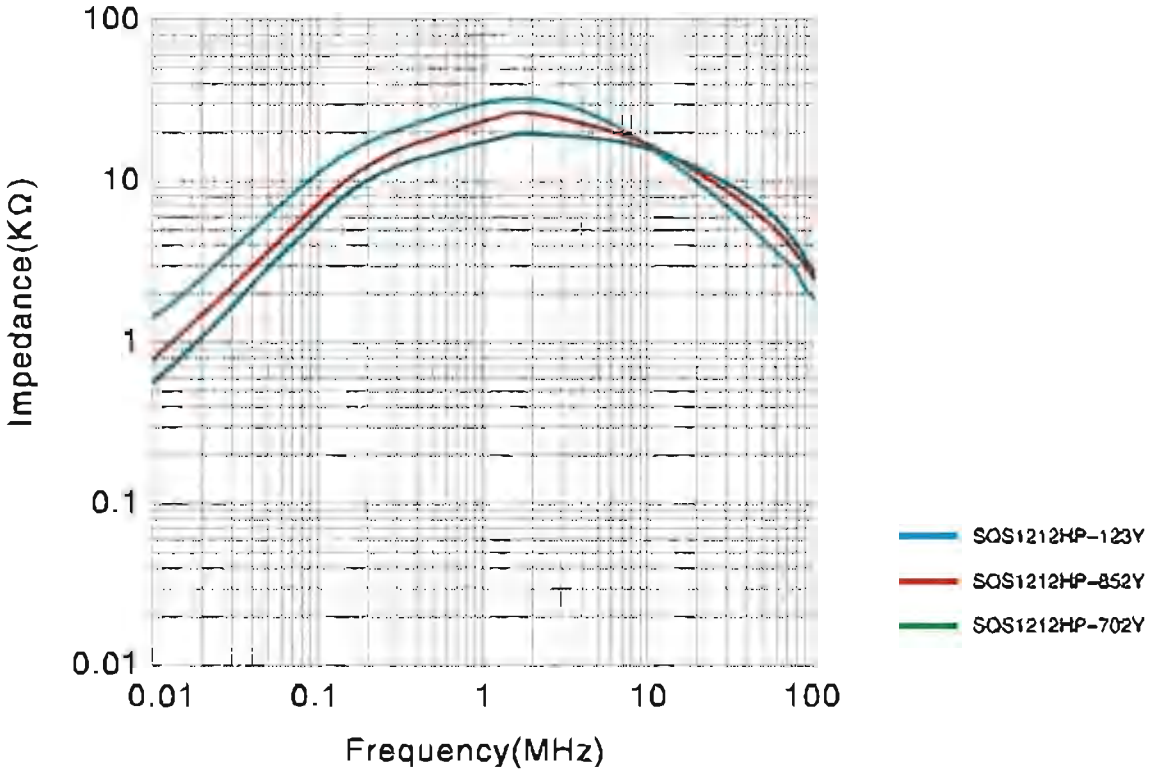
LAND PATTERNS

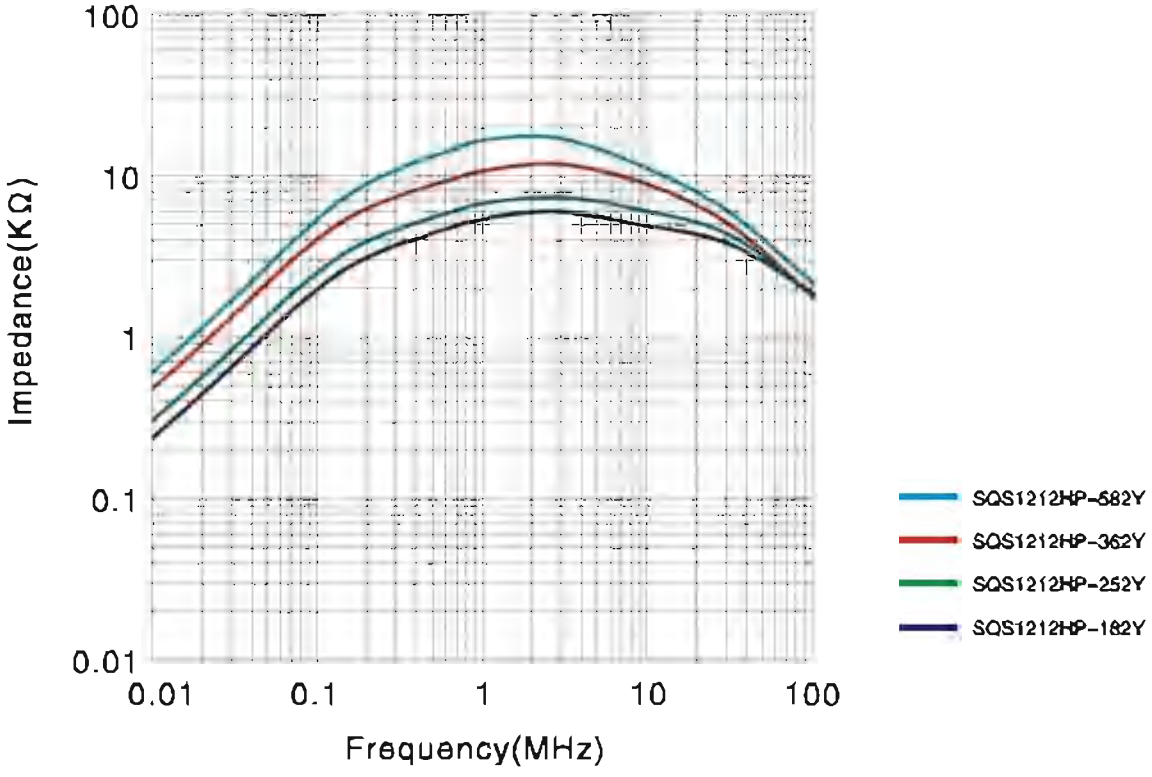




- Inductor Testing: HP4284A (Equivalent acceptable)
  DCR:QuadTech 1880 Milliohmmeter
- Rated voltage: 80VAC– 280VAC
- High withstanding voltage between windings:2400VAC /60 sec.
- High insulation resistance 100MΩ Min@ 500VDC between windings.
- Operating temperature:–40℃–+125℃ (including coil temperature rise).
- Storage temperature:– 40℃– +85℃.
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL–STD–202E

IMPEDANCE VS FREQUENCY:





SMD Flat Common Mode Chokes

SQS1515A SERIES

FEATURES:

- Compact size,low DCR,low leakage due to square core
- High permeability material,High impedance at low frequency
- High attenuation to noise,due to low stray capacitance
- Flammability tested to UL94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost,high consistency with automated production
- RoHS,REACH compliance

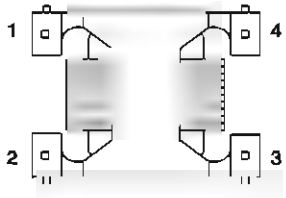
APPLICATION:

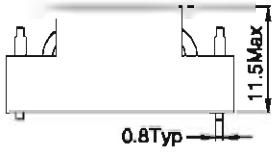
- Solutions for use in a wide array of power supply circuits
- High dealty switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications: LCD TV,Battery chargers,Power Adaptar,Home appliances
- Space saving for existing Common Mode Chokes

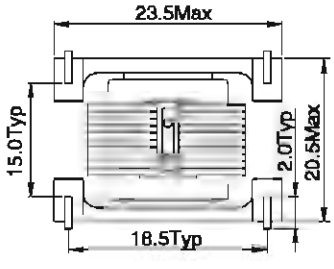
ELECTRICAL CHARACTERISTICS:

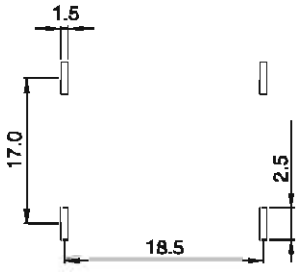
Part Number	Inductance Min. (mH).	DCR Max. (mΩ).	Rated current (A)
SQS1515A-203-1.5A	20.0	250	1.5-2.0
SQS1515A-153-1.8A	15.0	200	1.8-2.2
SQS1515A-153-2.0A	15.0	180	2.0-2.8
SQS1515A-103-2.0A	10.0	150	2.0-2.5
SQS1515A-103-2.5A	10.0	80	2.5-3.0
SQS1515A-502-2.5A	5.0	80	2.5-3.5
SQS1515A-302-3.5A	3.0	70	3.5-4.5
SQS1515A-202-5.0A	2.0	60	5.0-5.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

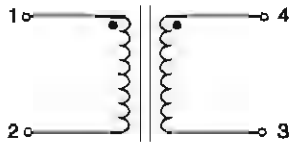






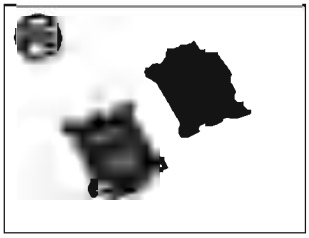


LAND PATTERNS



Note:

- Test frequency 1.0KHz,0.25V
- Rated voltage .....80Vac~280Vac
- Insulation voltage 1.5KVac,60Sec
- Operating temperature .....-25℃ to +125℃ Including coil temperature rise
- Storage temperature .....-25℃ to +100℃
- Hi-Pot..... 2400Vac/60Sec
- Insulation resistance.....100MΩ Min@500Vdc
- Power range 60W-120W



SMD Flat Common Mode Chokes

SQS1515B SERIES

FEATURES:

- Compact size,low DCR,low leakage due to square core
- High permeability material,High impedance at low frequency
- High attenuation to noise,due to low stray capacitance
- Flammability tested to UL94V–0
- High withstanding voltage between winding
- High insulation resistance
- Low cost,high consistency with automated production
- RoHS,REACH compliance

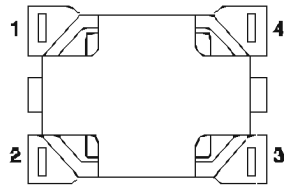
APPLICATION:

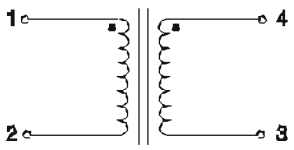
- Solutions for use in a wide array of power supply circuits
- High dasity switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications: LCD TV,Battery chargers,Power Adapter,Home appliances
- Space saving for existing Common Mode Chokes

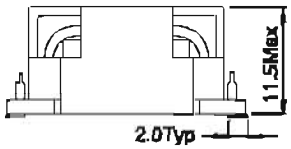
ELECTRICAL CHARACTERISTICS:

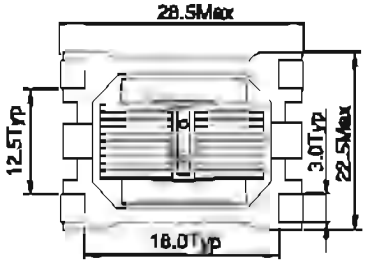
Part Number	Inductance Min. (mH).	DCR Max. (mΩ).	Rated current (A)
SQS1515B–203–1.5A	20.0	250	1.5–2.0
SQS1515B–153–1.8A	15.0	200	1.8–2.2
SQS1515B–153–2.0A	15.0	180	2.0–2.8
SQS1515B–103–2.0A	10.0	150	2.0–2.5
SQS1515B–103–2.5A	10.0	80	2.5–3.0
SQS1515B–502–2.5A	5.0	80	2.5–3.5
SQS1515B–302–3.5A	3.0	70	3.5–4.5
SQS1515B–202–5.0A	2.0	60	5.0–5.0

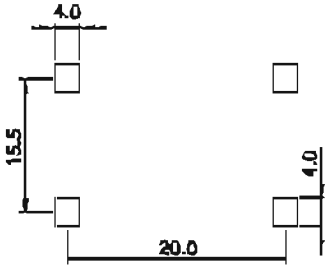
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:







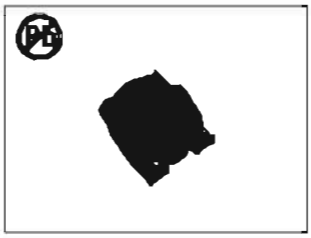




LAND PATTERNS

Note:

- Test frequency 1.0KHz,0.25V
- Rated voltage 60Vac–280Vac
- Insulation voltage 1.5KVac,60Sec
- Operating temperature .....–25℃ to +125℃ Including coil temperature rise
- Storage temperature .....–25℃ to +100℃
- HI–Pot..... 2400Vac/60Sec
- Insulation resistance.....100MΩ Min@500Vdc
- Power range 60W–120W



SMD Flat Common Mode Chokes

SQS1918 SERIES

FEATURES:

- Compact size,low DCR,low leakage due to square core
- High permeability material,High impedance at low frequency
- High attenuation to noise,due to low stray capacitance
- Flammability tested to UL94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost,high consistency with automated production
- RoHS,REACH compliance

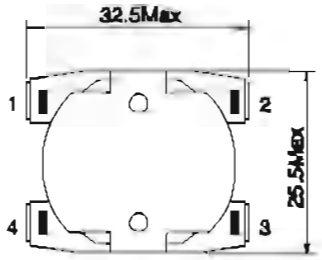
APPLICATION:

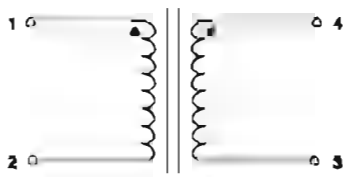
- Solutions for use in a wide array of power supply circuits
- High dealty switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications: LCD TV,Battery chargers,Power Adapter,Home appliances
- Space saving for existing Common Mode Chokes

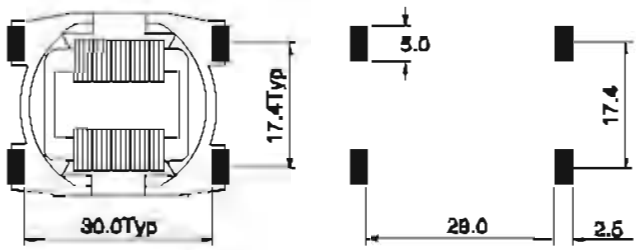
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Min. (mH).	DCR Max. (mΩ).	Rated current (A)
SQS1918-602-3.0A	6.0	100	3.0
SQS1918-123-2.0A	12.0	115	2.0
SQS1918-223-1.5A	22.0	159	1.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:







LAND PATTERNS

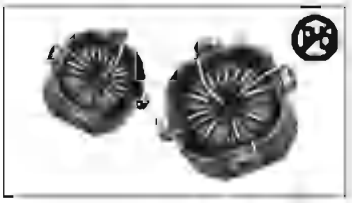
Note:

- Test frequency 1.0KHz,0.25V
- Rated voltage .....80Vac~280Vac
- Insulation voltage 1.5KVac,60Sec
- Operating temperature .....-25℃ to +125℃ Including coil temperature rise
- Storage temperature .....-25℃ to +100℃
- Hi-Pot..... 2400Vac/60Sec
- Insulation resistance.....100MΩ Min@500Vdc

SURFACE-MOUNT TOROIDAL COILS AND COMMON MODE TOROIDAL CHORES

STC SERIES

STC-01, 02, 03, 04



FEATURES:

- Higher Frequency
- High Saturation Material
- Low EMI Radiation
- Pick and Place
  Low DC Resistance

OPTIONS:

- Tape and Reel is Standard
- Custom Design Available
- CMC Design Available
- Tolerance:20% is Standard
  Tighter Tolerances Available

COMMON APPLICATIONS:

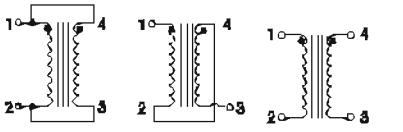
- Electronic Appliance
- DC – DC Conversion (Parallel Mode)
- Isolation/Coupling(Transformer)
- Input Filter(Serial Mode)
- EMI/RFI Suppression

STANDARD SPECIFICATION:

Part Number STC-XX-	Parallel Ratings 01			Parallel Ratings 02			Parallel Ratings 03			Parallel Ratings 04		
	OCL nominal +/-25% (μH)	IDC A(max)	DCR Ω @20℃	OCL nominal +/-25% (μH)	IDC A(max)	DCR Ω @20℃	OCL nominal +/-25% (μH)	IDC A(max)	DCR Ω @20℃	OCL nominal +/-25% (μH)	IDC A(max)	DCR Ω @20℃
0.33	0.402	10.0	0.0032	0.264	10.6	0.0026	0.356	11.4	0.0027	0.319	12.2	0.0026
0.68	0.752	9.0	0.0039	0.675	9.4	0.0039	0.686	9.3	0.0041	0.744	10.6	0.0034
1.0	1.18	7.26	0.0060	1.26	8.22	0.0050	1.08	8.38	0.0051	1.39	9.23	0.0045
2.0	2.30	5.64	0.010	1.88	6.74	0.0077	2.11	7.25	0.0068	2.18	8.38	0.0054
5.0	4.70	4.27	0.017	5.06	4.84	0.018	5.20	5.24	0.013	4.28	7.21	0.0073
8.0	7.84	3.37	0.028	7.80	3.50	0.027	8.43	4.29	0.020	8.70	5.48	0.013
10.0	10.58	2.84	0.039	11.38	2.89	0.040	9.68	3.84	0.027	10.58	4.87	0.017
15.0	15.23	2.07	0.075	15.48	2.89	0.048	15.52	3.25	0.033	14.70	3.87	0.025
20.0	20.73	1.71	0.109	20.22	2.24	0.067	20.81	2.43	0.051	18.58	3.52	0.029
25.0	24.86	1.46	0.148	25.60	1.89	0.085	24.77	2.34	0.065	25.14	3.02	0.041
33.0	34.26	1.22	0.213	34.84	1.56	0.138	33.71	1.93	0.098	34.80	2.49	0.061
50.0	51.16	0.98	0.327	49.38	1.28	0.205	48.71	1.56	0.147	50.11	2.05	0.089
68.0	67.87	0.82	0.375	66.44	1.07	0.293	68.80	1.28	0.217	66.21	1.70	0.121
100.0	99.45	0.74	0.588	102.38	0.75	0.509	99.07	1.05	0.325	100.57	1.37	0.201
150.0	147.4	0.57	0.713	152.9	0.65	0.722	148.7	0.85	0.469	153.5	1.10	0.318
200.0	198.6	0.82	0.825	197.5	0.64	0.814	198.8	0.71	0.711	200.4	0.92	0.447
300.0	300.8	0.56	1.012	303.7	0.56	1.006	296.2	0.56	1.122	302.8	0.75	0.675

PHYSICAL CHARACTERISTICS DIMENSIONS:INCHES

CONNECTION DIAGRAMS

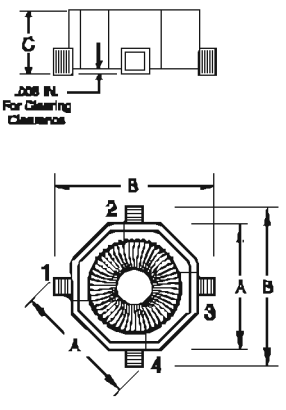


PARALLEL SERIES TRANSFORMER

Case Size	A	B	C	D	E	F	G
STC-01	.350	.450	.185	.277	.422	.392	.145
STC-02	.350	.450	.235	.277	.422	.392	.145
STC-03	.450	.550	.190	.348	.492	.492	.180
STC-04	.450	.550	.250	.348	.492	.492	.180

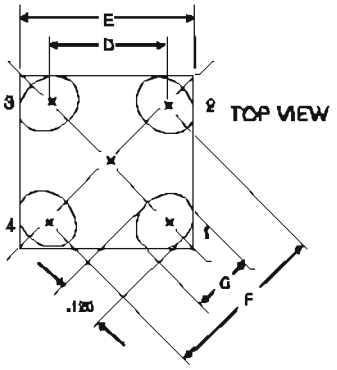
Dimensions in inches,typical

MECHANICAL DIAGRAM



BOTTOM VIEW

RECOMENDED LAYOUT

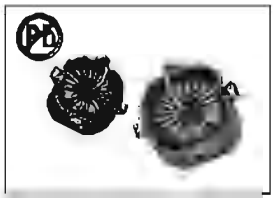


TECHNICAL INFORMATION:

Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩ min.
Turns Ratio: 1.1 ± 0%
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4 ± 1 seconds
Operating temperature:–40℃ to +125℃
Storage Temperature: –55℃ to +125℃
Different package available per special request
Max of 35% saturation on DC bias applied

Note:All specifications subject to change without notice.

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YenTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87861340



COMMON MODE CHOKES
STC01F SERIES

FEATURES:

- Inductance range from 4.5uH to 205uH
- Current range up to 7.0 Amps
- Noise attenuation up to 44 dB
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

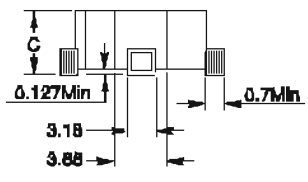
COMMON APPLICATIONS:

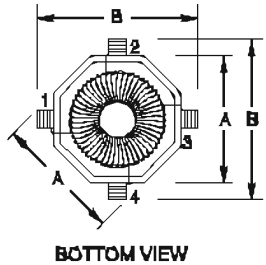
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

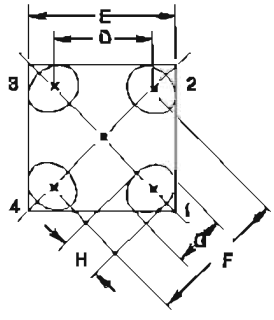
Part Number	L(0A) (uH) Min 100KHz,0.1V	Irms (A)Max	DCR (Ω)Typ (1-2)	DCR (Ω)Typ (4-3)	Lk (uH) Typ 100KHz,0.1V	Interwinding Capacitance (pF)
STC01F-4R5Y	4.5	7.00	0.0027	0.0027	0.05	2.0
STC01F-8R0Y	8	5.70	0.0040	0.0040	0.09	2.1
STC01F-120Y	12.6	4.10	0.0077	0.0077	0.14	2.2
STC01F-180Y	18	3.80	0.0089	0.0089	0.20	2.3
STC01F-250Y	25	3.60	0.0100	0.0100	0.28	2.4
STC01F-320Y	32.8	3.10	0.0138	0.0138	0.36	2.5
STC01F-410Y	41.5	2.80	0.019	0.019	0.45	2.6
STC01F-510Y	51.2	2.20	0.026	0.026	0.056	2.7
STC01F-620Y	62	1.90	0.035	0.035	0.68	2.7
STC01F-730Y	73.7	1.65	0.048	0.048	0.81	2.8
STC01F-101Y	100	1.35	0.070	0.070	1.10	2.9
STC01F-131Y	131	1.15	0.100	0.100	1.45	3.0
STC01F-161Y	166	1.00	0.138	0.138	1.83	3.1
STC01F-201Y	205	0.85	0.186	0.186	2.25	3.2

PHYSICAL CHARACTERISTICS

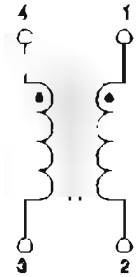




BOTTOM VIEW

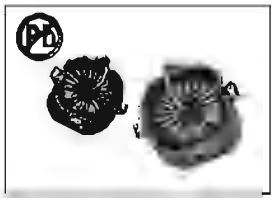


Recomended layout



NOTES:
Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩ min.
Dielectric Strength: 500 Vrms between windings
Turns Ratio: 1:1
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4 ± 1 seconds
Operating temperature:-40℃ to +125℃
Storage Temperature: -40℃ to +125℃
Different package available per special request
Max of 35% saturation on DC bias applied

A	B	C	D	E	F	G	H
8.89	11.43	4.2Max	7.04	10.72	8.86	3.68	3.05



COMMON MODE CHOKES
STC02F SERIES

FEATURES:

- Inductance range from 25uH to 1340uH
- Current range up to 5.35 Amps
- Noise attenuation up to 44 dB
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

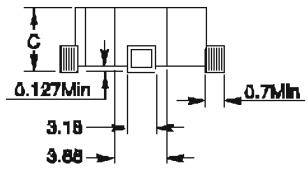
COMMON APPLICATIONS:

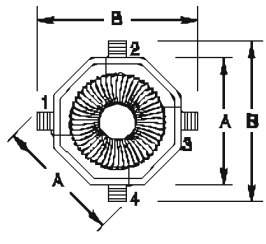
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

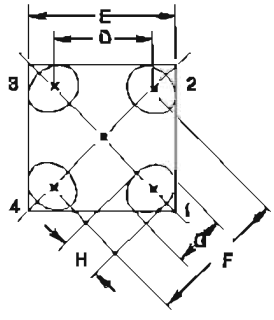
Part Number	L(0A) (uH) Min 100KHz,0.1V	Irms (A)Max	DCR (Ω)Typ (1-2)	DCR (Ω)Typ (4-3)	Lk (uH) Typ 100KHz,0.1V	Interwinding Capacitance (pF)
STC02F-250Y	25	5.35	0.005	0.005	0.22	2.0
STC02F-400Y	40	4.40	0.008	0.008	0.34	2.3
STC02F-570Y	57	3.60	0.012	0.012	0.47	2.5
STC02F-101Y	102	2.80	0.019	0.019	0.80	2.8
STC02F-161Y	160	2.30	0.029	0.029	1.25	3.1
STC02F-231Y	230	1.85	0.044	0.044	1.75	3.4
STC02F-271Y	270	1.60	0.060	0.060	2.00	3.6
STC02F-361Y	360	1.35	0.084	0.084	2.60	3.9
STC02F-461Y	460	1.10	0.120	0.120	3.30	4.1
STC02F-571Y	575	0.94	0.170	0.170	4.00	4.3
STC02F-701Y	700	0.80	0.230	0.230	5.00	4.6
STC02F-911Y	915	0.67	0.330	0.330	6.30	4.9
STC02F-102Y	1070	0.58	0.440	0.440	7.30	5.1
STC02F-132Y	1340	0.50	0.620	0.620	9.00	5.4

PHYSICAL CHARACTERISTICS

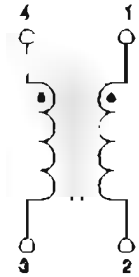




BOTTOM VIEW

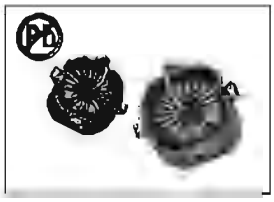


Recomended layout



NOTES:
Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩ min.
Dielectric Strength: 500 Vrms between windings
Turns Ratio: 1:1
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4 ± 1 seconds
Operating temperature:-40℃ to +125℃
Storage Temperature: -40℃ to +125℃
Different package available per special request
Max of 35% saturation on DC bias applied

A	B	C	D	E	F	G	H
8.89	11.43	8.0Max	7.04	10.72	8.86	3.68	3.05



COMMON MODE CHOKES
STC04F SERIES

FEATURES:

- Inductance range from 28uH to 1310uH
- Current range up to 5.7 Amps
- Noise attenuation up to 44 dB
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

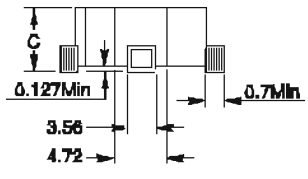
COMMON APPLICATIONS:

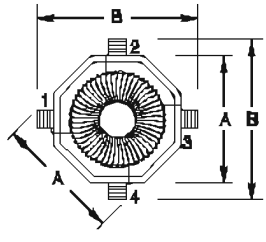
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

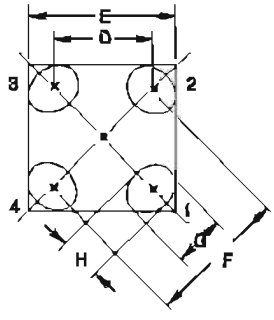
Part Number	L(0A) (uH) Min 100KHz,0.1V	Irms (A)Max	DCR (Ω)Typ (1-2)	DCR (Ω)Typ (4-3)	Lk (uH) Typ 100KHz,0.1V	Interwinding Capacitance (pF)
STC04F-280Y	28	5.70	0.005	0.005	0.31	2.80
STC04F-450Y	45	5.10	0.006	0.006	0.46	3.05
STC04F-640Y	64	4.75	0.007	0.007	0.64	3.30
STC04F-881Y	88	3.95	0.010	0.010	0.85	3.50
STC04F-141Y	146	3.10	0.017	0.017	1.30	3.70
STC04F-211Y	217	2.85	0.020	0.020	1.90	3.90
STC04F-251Y	258	2.45	0.027	0.027	2.20	4.15
STC04F-351Y	350	2.00	0.040	0.040	3.00	4.40
STC04F-401Y	400	1.70	0.053	0.053	3.30	4.65
STC04F-511Y	516	1.45	0.078	0.078	4.20	4.85
STC04F-641Y	648	1.20	0.107	0.107	5.10	5.10
STC04F-791Y	790	1.05	0.145	0.145	6.10	5.35
STC04F-102Y	1030	0.88	0.210	0.210	7.80	5.55
STC04F-132Y	1310	0.75	0.300	0.300	9.60	5.80

PHYSICAL CHARACTERISTICS

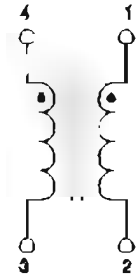




BOTTOM VIEW

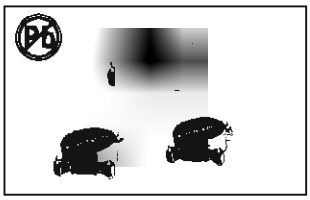


Recomended layout



NOTES:
Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩ min.
Dielectric Strength: 500 Vrms between windings
Turns Ratio: 1:1
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4 ± 1 seconds
Operating temperature:-40℃ to +125℃
Storage Temperature: -40℃ to +125℃
Different package available per special request
Max of 35% saturation on DC bias applied

A	B	C	D	E	F	G	H
11.43	13.97	6.35Max	8.84	12.5	12.5	4.06	3.05



SURFACE-MOUNT TOROIDAL CHOKES

STC-05,06P SERIES

FEATURES:

- Higher Frequency
- High Saturation Material
- Low EMI Radiation
- Pick and PLace
  Low DC Resistance

OPTIONS:

- Packaging:Tape & Reel is standard (Qty:2000pcs)
  Bulk packaging available for smaller quantities
- Tolerance:10% and 5% is standard, tighter tolerances available

COMMON APPLICATIONS:

- Electronic Appliances
- DC – DC Conversion (Parallel Mode)
- Isolation/Coupling(Transformer)
- Input Filter(Serial Mode)
- EMI/RFI Suppression

ELECTRICAL CHARACTERISTICS:

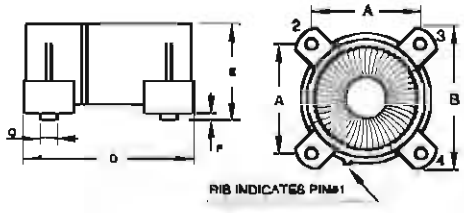
POWDERED IRON CORE				MPP ALLOY CORE			
Part Number	L (μH)	DCR (Ω) Max	IDC (A) Max	Part Number	L (μH)	DCR (Ω) Max	IDC (A) Max
STC-05-R47M	0.47	0.005	7.90	STC-06P-R47M	0.47	0.004	7.90
STC-05-R68M	0.68	0.006	7.20	STC-06P-R68M	0.68	0.005	7.00
STC-05-1R0M	1.00	0.009	5.90	STC-06P-1R0M	1.00	0.006	6.50
STC-05-2R0M	2.00	0.014	4.60	STC-06P-2R0M	2.00	0.007	5.90
STC-05-5R0M	5.00	0.027	3.30	STC-06P-5R0M	5.00	0.014	4.40
STC-05-8R0M	8.00	0.033	3.00	STC-06P-8R0M	8.00	0.019	3.50
STC-05-100M	10.0	0.047	2.50	STC-06P-100M	10.0	0.020	3.40
STC-05-150M	15.0	0.057	2.30	STC-06P-150M	15.0	0.024	3.00
STC-05-200M	20.0	0.085	1.90	STC-06P-200M	20.0	0.055	2.10
STC-05-250M	25.0	0.116	1.60	STC-06P-250M	25.0	0.064	2.00
STC-05-330M	33.0	0.166	1.30	STC-06P-330M	33.0	0.072	1.80
STC-05-500M	50.0	0.202	1.20	STC-06P-500M	50.0	0.111	1.50
STC-05-680M	68.0	0.238	1.10	STC-06P-680M	68.0	0.158	1.20
STC-05-101M	100	0.585	0.72	STC-06P-101M	100	0.303	0.92
STC-05-151M	150	0.696	0.54	STC-06P-151M	150	0.372	0.82
STC-05-201M	200	0.810	0.50	STC-06P-201M	200	0.545	0.64
STC-05-301M	300	1.003	0.54	STC-06P-301M	300	0.672	0.62

Note:1. K=±10%,M=±20%,N=±30%

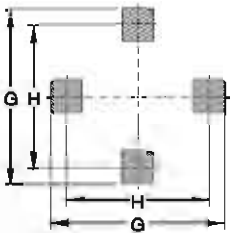
TECHNICAL INFORMATION:

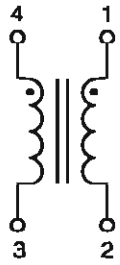
- Testing: (Equivalent acceptable)
  Inductance:Reduced by 10% to 20%@ IDC
- RDC:QuadTech 1880 Milliohmmeter
- IDC Max:Lowers Inductance by 10-20%
- Temperature range: -55℃ to +125℃

PHYSICAL CHARACTERISTICS:



LAND PATTERNS





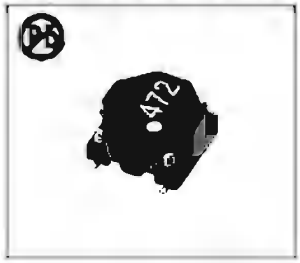
DIMENSIONS IN:mm

Part number	A	B	C	D	E	F	G	H
STC05	7.00±0.25	9.14±0.25	1.52±0.25	8.90±0.25	5.08±0.25	1.02Max	12.7	10.3
STC06P	10.2±0.25	13.5±0.25	3.20±0.25	12.4±0.25	7.87Max	1.02Max	17.4	14.35

Note:All specifications subject to change without notice.

COMMON MODE POWER LINE CHOKE

STC05A SERIEIS



FEATURES:

- Common mode chokes for telecom applications
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

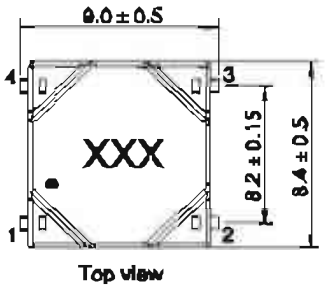
APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

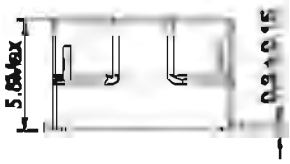
ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) +50%/-30% 10KHz,0.1V	DCR (mΩ)Max	IDC (A)Max	Hi-Pot (Vdc) 50Hz,1mA,1S
STC05A-102Y	1000	180	0.95	500
STC05A-222Y	2200	300	0.75	500
STC05A-332Y	3300	360	0.52	500
STC05A-392Y	3900	540	0.52	500
STC05A-472Y	4700	900	0.35	500

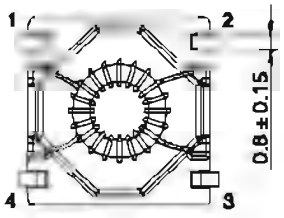
PHYSICAL CHARACTERISTICS



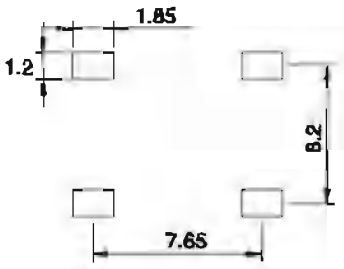
Top view



Side view



Bottom view



Pad layout

NOTES:

Temperature Rise .....40℃ typical at IDC

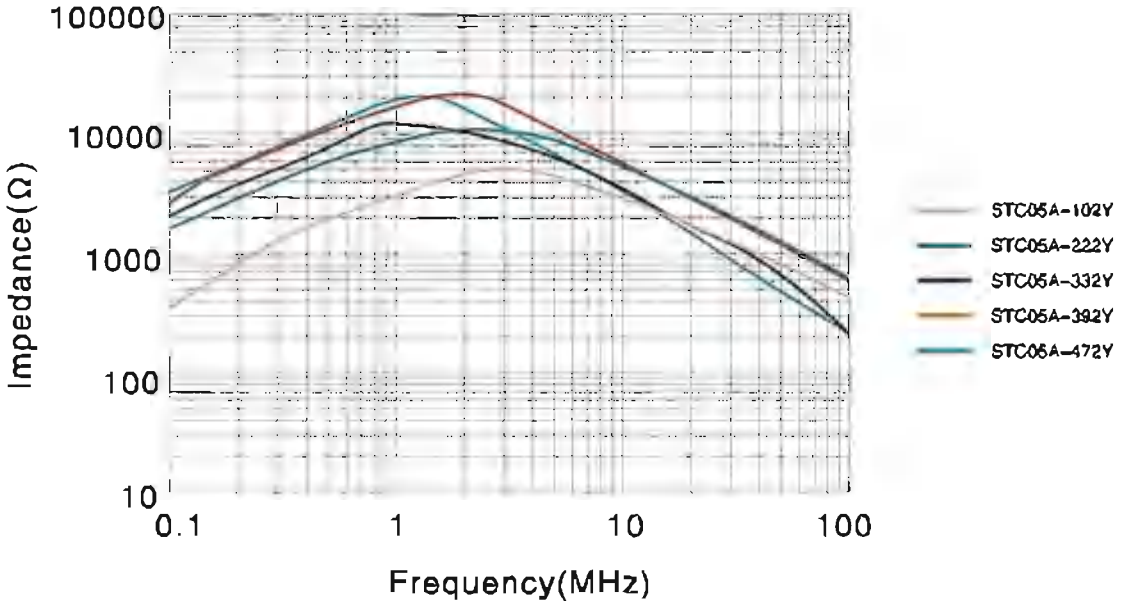
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

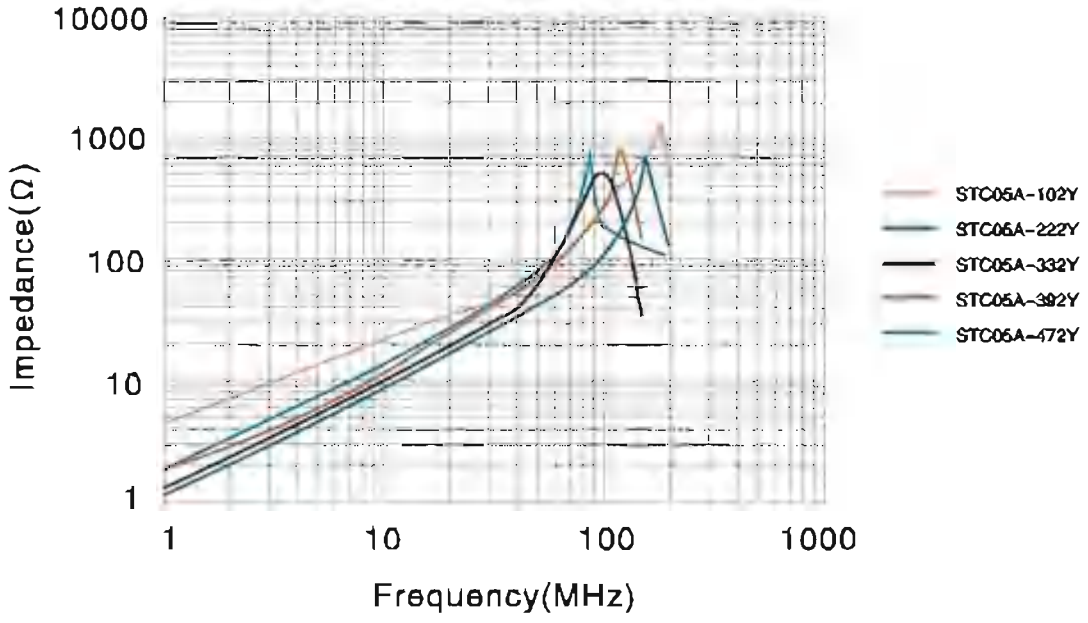
Soldering .....245℃, 5 seconds max

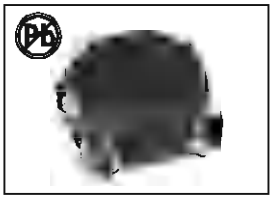
Dielectric Strength .....500 Vrms between windings

IMPEDANCE COMMON MODE



IMPEDANCE DIFFERENTIAL MODE





COMMON MODE CHOKES

STC05F SERIES

FEATURES:

- Inductance range from 25uH to 1600uH
- Current range up to 5.35 Amps
- Noise attenuation up to 5.4 dB
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

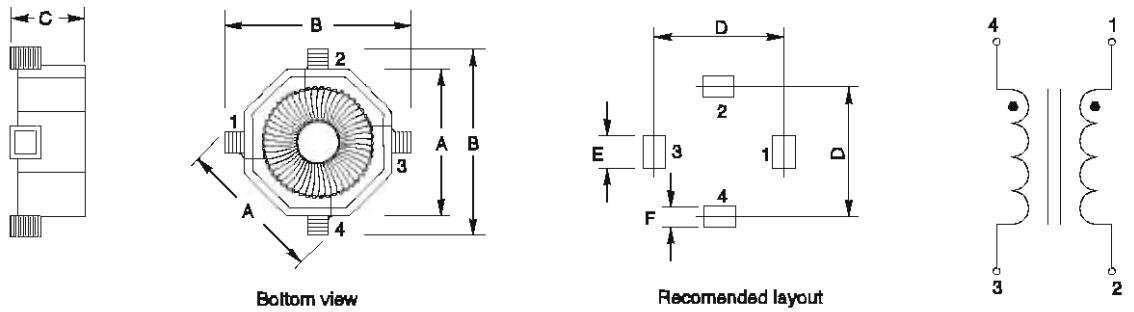
COMMON APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

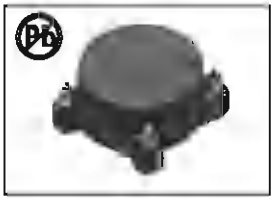
Part Number	L(0A) (uH) ±30% 100KHz,0.1V	Irms (A)Max	DCR (mΩ)Typ (1-2)	DCR (mΩ)Typ (4-3)	Lk (uH) Typ 100KHz,0.1V	Interwinding Capacitance (pF)
STC05F-250Y	25.0	5.35	3.10	3.10	0.22	2.00
STC05F-400Y	40.0	4.40	3.89	3.89	0.34	2.30
STC05F-700Y	70.0	3.60	5.35	5.35	0.47	2.50
STC05F-950Y	95.0	2.80	7.97	7.97	0.80	2.80
STC05F-151Y	150.0	2.30	16.85	16.85	1.25	3.10
STC05F-271Y	275.0	1.85	34.53	34.53	1.75	3.40
STC05F-321Y	320.0	1.60	39.72	39.72	2.00	3.60
STC05F-401Y	400.0	1.35	42.73	42.73	2.60	3.90
STC05F-501Y	500.0	1.10	57.43	57.43	3.30	4.10
STC05F-621Y	620.0	0.94	73.72	73.72	4.00	4.30
STC05F-751Y	750.0	0.80	98.34	98.34	5.00	4.60
STC05F-112Y	1100.0	0.67	161.2	161.2	6.30	4.90
STC05F-132Y	1300.0	0.58	245.5	245.5	7.30	5.10
STC05F-162Y	1600.0	0.50	350.5	350.5	9.00	5.40

PHYSICAL CHARACTERISTICS



NOTES:
Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩmin.
Dielectric Strength: 500 Vrms between windings
Turns Ratio: 1:1
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4±1 seconds
Operating temperature:-40℃ to +125℃
Storage Temperature: -40℃ to +125℃

A	B	C	D	E	F
8.8	11.8Max	5.2Max	9.9	3.5	3.0



COMMON MODE CHOKES
STC06 SERIES

FEATURES:

- Inductance range from 0.075mH to 12mH
- Current range up to 9.6 Amps
- Hight resonant frequency
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Packaging:Tape & Reel is standard Bulk packaging available for smaller quantities

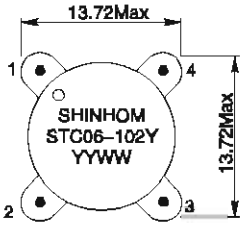
COMMON APPLICATIONS:

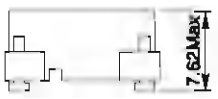
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

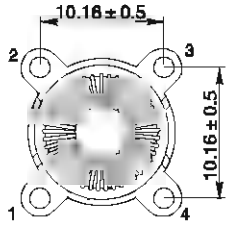
ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (mH) ±25% 10KHz,0.1V	Leakage Inductance (uH)Max	DCR (Ω)Max	Irms (A) ΔT=20℃	Irms (A) ΔT=40℃
STC06-101Y	0.1	0.8	0.006	6.85	9.80
STC06-151Y	0.15	1.1	0.010	5.75	8.20
STC06-221Y	0.22	1.5	0.012	4.50	6.60
STC06-331Y	0.33	2.1	0.017	4.25	6.40
STC06-501Y	0.5	2.6	0.024	3.70	5.30
STC06-751Y	0.75	3.8	0.035	3.00	4.40
STC06-102Y	1.0	4.6	0.049	2.70	4.05
STC06-122Y	1.2	5.5	0.068	2.25	3..45
STC06-182Y	1.8	8.0	0.106	1.70	2.50
STC06-222Y	2.2	10.5	0.150	1.45	2.25
STC06-332Y	3.3	17.0	0.210	1.10	2.00
STC06-502Y	5.0	27.0	0.320	0.90	1.35
STC06-752Y	7.5	42.0	0.640	0.80	1.10
STC06-103Y	10.0	55.0	0.900	0.70	0.85
STC06-123Y	12.0	70.0	1.700	0.50	0.65

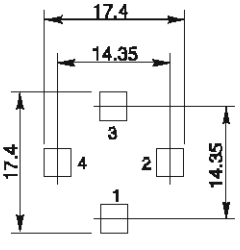
PHYSICAL CHARACTERISTICS



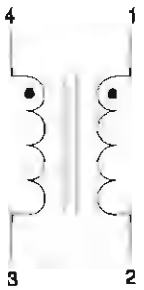




Bottom view



Recomended layout



NOTES:

1. Inductance tested at 10KHz,0.1V
2. DCR Measured at 25℃
3. Rated voltage: 1500V for 2Seconds between windings
4. Irms current: Current applied to one winding resulting in A Temperature rise of 20℃ or 40℃ at an ambient temperature of 25℃
5. Electrical specifications measured at 25℃
6. Operating temperature: -40℃ to +105℃
7. Storage temperature: -55℃ to +130℃

COMMON MODE POWER LINE CHOKE

STC06A SERIEIS

FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

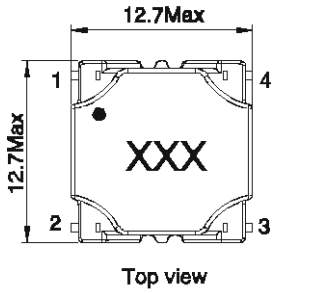
APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

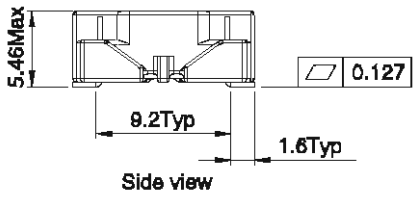
ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) ±35% 100KHz,0.1V	DCR (mΩ)Max	IDC (A)Max	Hi-Pot (Vdc) 50Hz,1mA,1S
STC06A-881Y	880	110	1.63	1000
STC06A-112Y	1170	200	1.22	1000
STC06A-302Y	3000	280	0.85	1000
STC06A-392Y	3900	350	0.85	1000
STC06A-682Y	6800	700	0.3	1000

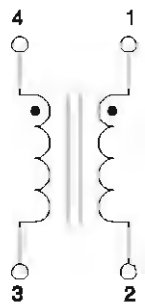
PHYSICAL CHARACTERISTICS

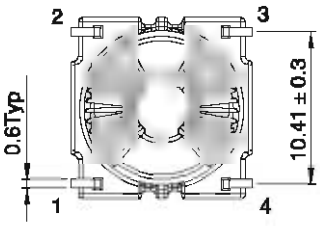


Top view

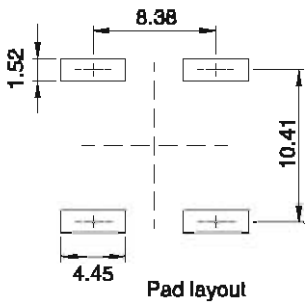


Side view





Bottom view



Pad layout

NOTES:

Temperature Rise .....40℃ typical at IDC

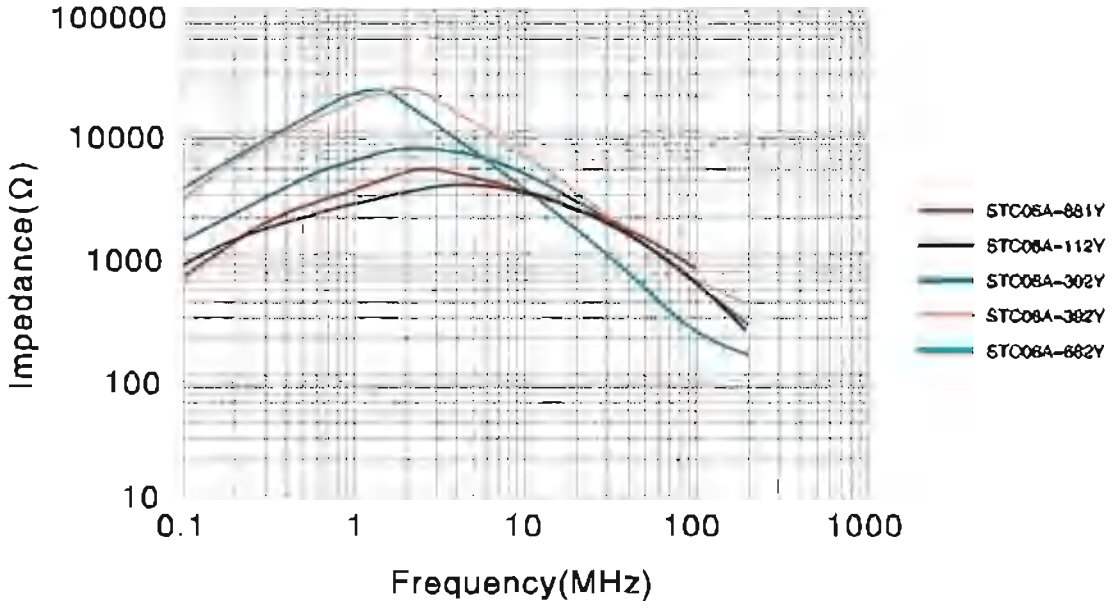
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

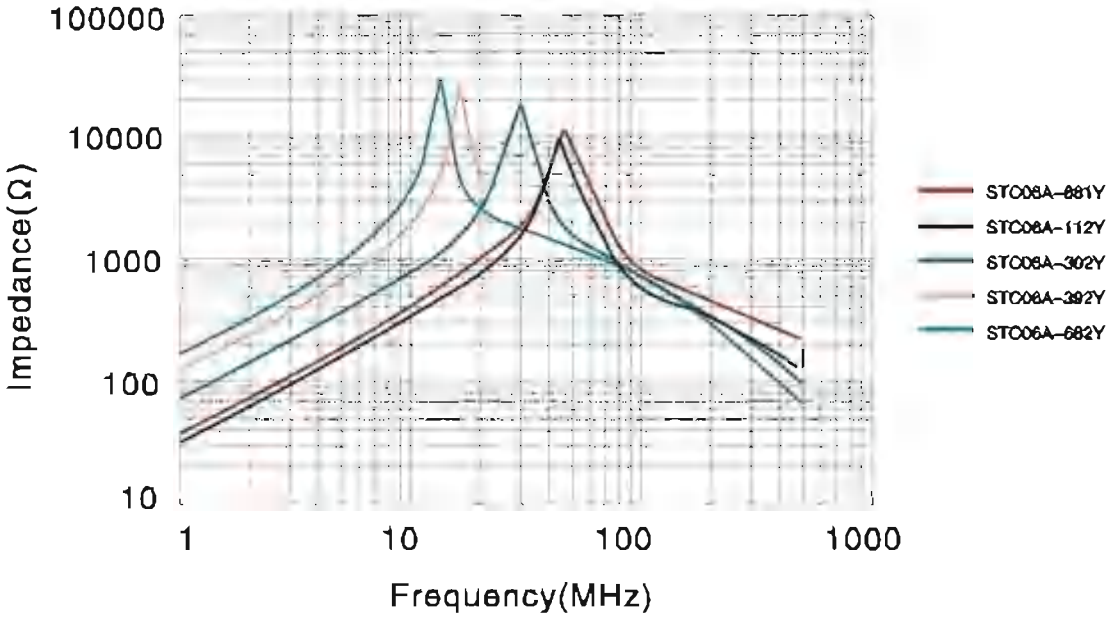
Soldering .....245℃, 5 seconds max

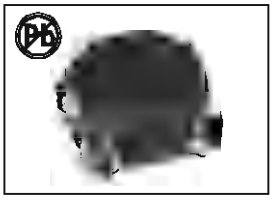
Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE



IMPEDANCE DIFFERENTIAL MODE





COMMON MODE CHOKES

STC06F SERIES

FEATURES:

- Inductance range from 34.9uH to 1600uH
- Current range up to 5.7 Amps
- Noise attenuation up to 5.8 dB
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

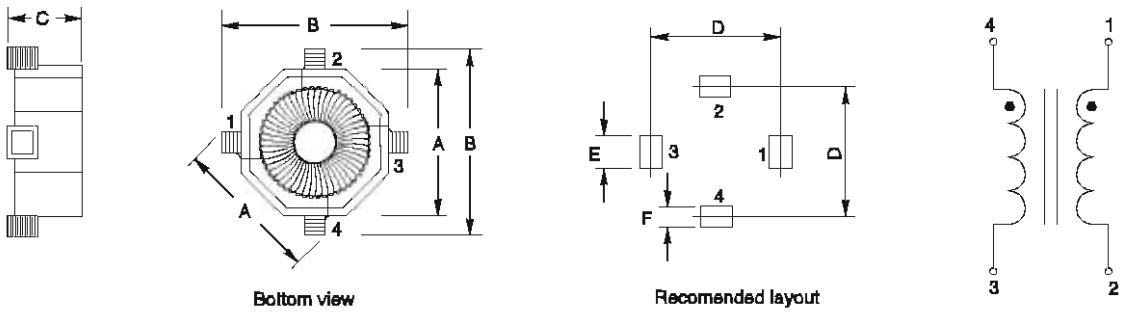
COMMON APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) ±30% 100KHz,0.1V	Irms (A)Max	DCR (mΩ)Typ (1-2)	DCR (mΩ)Typ (4-3)	Lk (uH) Typ 100KHz,0.1V	Interwinding Capacitance (pF)
STC06F-340Y	34.9	5.70	4.63	4.63	0.31	2.80
STC06F-500Y	50.0	5.10	5.12	5.12	0.46	3.05
STC06F-750Y	75.0	4.75	6.52	6.52	0.64	3.30
STC06F-101Y	105.0	3.95	7.92	7.92	0.85	3.50
STC06F-171Y	175.0	3.10	15.9	15.9	1.30	3.70
STC06F-261Y	260.0	2.85	19.5	19.5	1.90	3.90
STC06F-311Y	310.0	2.45	25.3	25.3	2.20	4.15
STC06F-421Y	420.0	2.00	36.8	36.8	3.00	4.40
STC06F-481Y	480.0	1.70	50.2	50.2	3.30	4.65
STC06F-621Y	620.0	1.45	62.1	62.1	4.20	4.85
STC06F-781Y	780.0	1.20	92.3	92.3	5.10	5.10
STC06F-951Y	950.0	1.05	132.1	132.1	6.10	5.35
STC06F-122Y	1250.0	0.88	192.2	192.2	7.80	5.55
STC06F-162Y	1800.0	0.75	286.5	286.5	9.60	5.80

PHYSICAL CHARACTERISTICS



NOTES:
Inductance measure at 100KHz 0.1VRms.
Insulation Resistance: 100Vdc 1KMΩmin.
Dielectric Strength: 500 Vrms between windings
Turns Ratio: 1:1
RDC:QuadTech 1880 Milliohmmeter
Soldering temperature:260℃ for 4±1 seconds
Operating temperature:-40℃ to +125℃
Storage Temperature: -40℃ to +125℃

A	B	C	D	E	F
11.4	14.3Max	8.0Max	12.44	3.5	3.0

COMMON MODE CHOKES

STC07 SERIES

FEATURES:

- Inductance range from 1mH to 39mH
- Current range up to 3.0 Amps
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Packaging:Tape & Reel is standard Bulk packaging available for smaller quantities

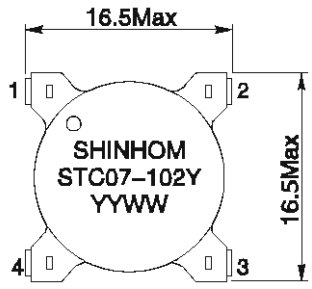
COMMON APPLICATIONS:

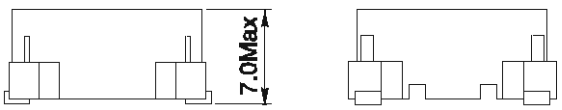
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

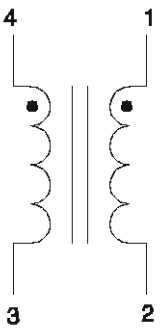
ELECTRICAL CHARACTERISTICS:

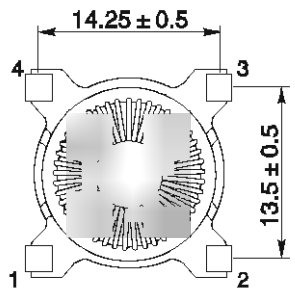
Part Number	L(0A) (mH) Min 1.0KHz,0.1V	IDC (A)	DCR (mΩ)Max
STC07-102Y	1	2.0	44.5
STC07-402Y	4	1.5	140
STC07-502Y	5	1.0	200
STC07-103Y	10	0.7	350
STC07-203Y	20	0.5	1000
STC07-393Y	39	0.3	3000

PHYSICAL CHARACTERISTICS

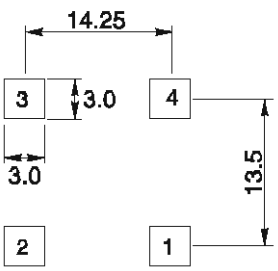








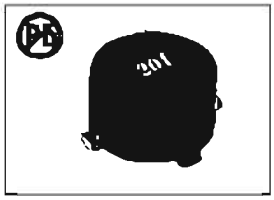
Bottom view



Recomended layout

NOTES:

1. Temperature Rise ...35℃ typical at Irms Operating Temperature .....-55℃ to +125℃ Storage Temperature
2. Storage Temperature .....-55℃ to +125℃ Soldering .....245℃, 5 seconds max. Dielectric Strength .....500 Vrms between windings
3. Core ..... .Ferrite
4. Wire .....Polyester-coated copper
5. Terminal Coating .....Sn-Ag-Cu alloy



COMMON MODE CHOKES

STC08 SERIES

FEATURES:

- Inductance range from 0.2mH to 20mH
- Current range up to 7.0 Amps
- Noise attenuation up to 44 dB
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

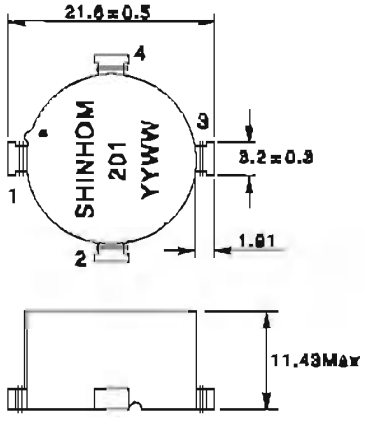
COMMON APPLICATIONS:

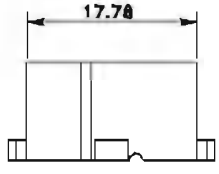
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

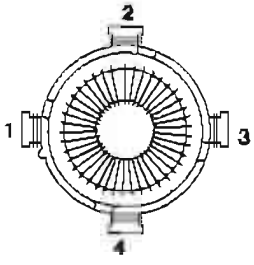
ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) Min 1.0KHz,0.1V	Lk (uH) Typ 100KHz,0.1V	DCR (Ω)Max	IDC (A)Max	Typ Frequency range with 20dB Atten
STC08-201Y	200	1.8	0.008	7.0	5-55MHz
STC08-501Y	500	2.2	0.010	6.0	4-40MHz
STC08-751Y	750	2.9	0.012	5.5	1-20MHz
STC08-102Y	1000	3.9	0.020	4.0	500KHz-40MHz
STC08-202Y	2000	0.3	0.030	3.5	300KHz-20MHz
STC08-502Y	5000	0.4	0.070	2.0	100KHz-10MHz
STC08-103Y	10000	0.5	0.150	1.5	50KHz-5MHz
STC08-203Y	20000	0.7	0.250	1.0	25KHz-4MHz

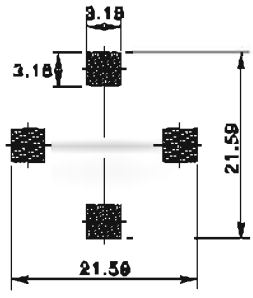
PHYSICAL CHARACTERISTICS







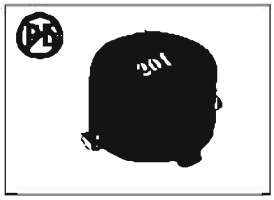
Bottom view



Recomended layout

NOTES:

1. Temperature Rise ...35℃ typical at Irms Operating Temperature .....-55℃ to +125℃ Storage Temperature
2. Storage Temperature .....-55℃ to +125℃ Soldering .....245℃, 5 seconds max. Dielectric Strength .....500 Vrms between windings
3. Core ..... .Ferrite
4. Wire .....Polyester-coated copper
5. Terminal Coating .....Sn-Ag-Cu alloy



COMMON MODE CHOKES
STC09 SERIES

FEATURES:

- Inductance range from 25uH to 2500uH
- Current range up to 10.0 Amps
- Noise attenuation up to 44 dB
- Frequency range up to 100 MHz
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Supplied in tape and reel packaging

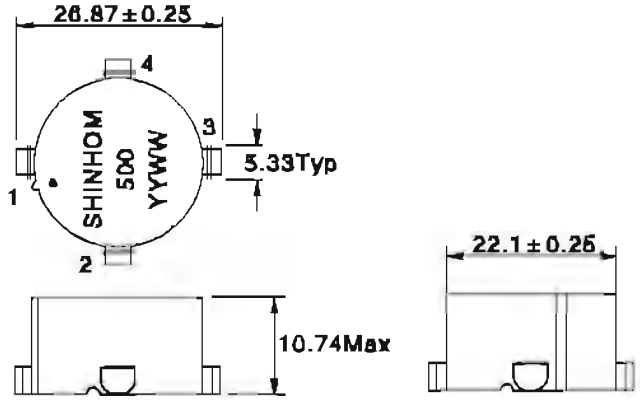
COMMON APPLICATIONS:

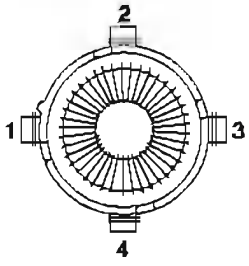
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

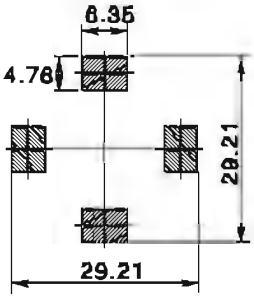
Part Number	L(0A) (uH) ± 25% 1.0KHz,0.1V	Lk (uH) Typ 100KHz,0.1V	DCR (Ω)Max	IDC (A)Max
STC09-250Y	25	0.7	0.014	10.0
STC09-500Y	50	0.8	0.014	10.0
STC09-101Y	100	1.4	0.016	9.5
STC09-151Y	150	1.8	0.016	9.5
STC09-201Y	200	2.2	0.018	8.5
STC09-301Y	300	3.3	0.020	7.5
STC09-451Y	450	4.8	0.024	6.5
STC09-651Y	650	6.2	0.030	5.5
STC09-102Y	1000	9.3	0.050	3.5
STC09-152Y	1500	14.5	0.090	2.5
STC09-252Y	2500	21.8	0.162	2.2

PHYSICAL CHARACTERISTICS





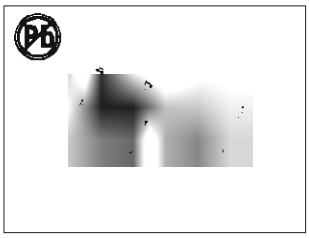
Bottom view



Recomended layout

NOTES:

1. Temperature Rise ...35℃ typical at Irms Operating Temperature .....-55℃ to +125℃ Storage Temperature
2. Storage Temperature .....-55℃ to +125℃ Soldering .....245℃, 5 seconds max. Dielectric Strength .....500 Vrms between windings
3. Core ..... .Ferrite
4. Wire .....Polyester-coated copper
5. Terminal Coating .....Sn-Ag-Cu alloy



SMD LINE FILTER

STR0602 SERIES

FEATURES:

- Compact design.
- Single layer winding for minimum capacitance.
- Meets UL 94V-0 flammability standard.
- Available on tape and reel for auto surface mounting.

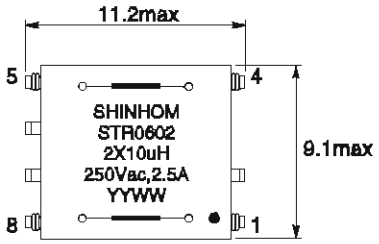
APPLCATIONS:

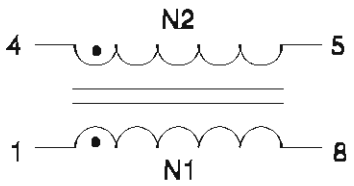
- EMI filters.
- Personal computers.
- Communication equipment.

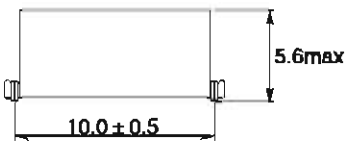
ELECTRICAL CHARACTERISTICS:

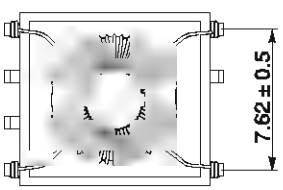
Part Number	L1=L2(uH) @10KHz,0.1V ±30%	DCR (winding) (mΩ) max.	Rated Current (A)max.
STR0602-100N	10	25	2.5
STR0602-150N	15	40	2.0
STR0602-200N	20	70	1.5
STR0602-121N	120	25	2.5
STR0602-201N	200	40	2.0
STR0602-301N	300	70	1.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

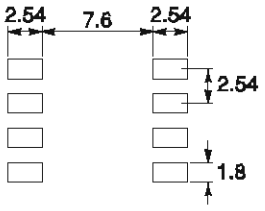








Bottom view

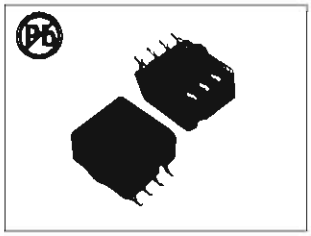


Layout recommendation

- IDC Max:Determined when superimposed
- Inductance test: HP4284A 10KHz 0.1V
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: -25℃ to +105℃
- Storage Temperature: -25℃ to +105℃
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Date

Note:All specifications subject to change without notice.

SMD LINE FILTER
STR0603 SERIES



FEATURES:

- SMD Housing
- High Frequency Design
- Excellent Mechanical Strength
- Excellent Solderability
- High Reliability
- Low Profile

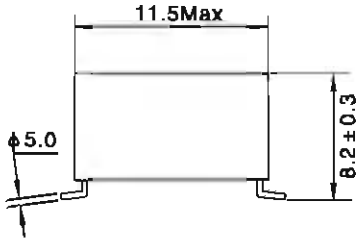
COMMON APPLICATIONS:

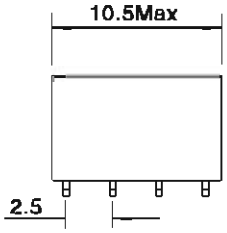
- VCRs
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

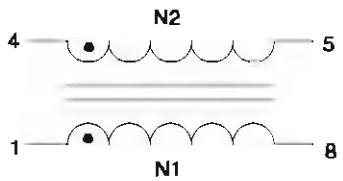
ELECTRICAL CHARACTERISTICS:

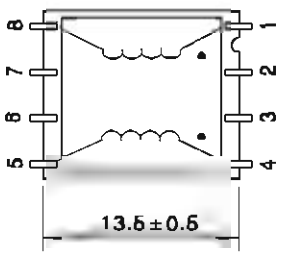
Part Number	L mH	Test Freq KHz	DCR Ω Max	IDC A Max
STR0603-102Y	1.0	1	0.82	0.5
STR0603-501Y	0.5	1	0.45	0.6
STR0603-221Y	0.22	1	0.22	0.8
STR0603-151Y	0.15	1	0.15	1.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

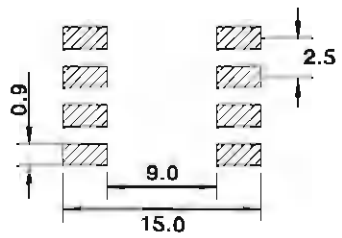








Bottom view



Layout recommendation

- IDC Max:Determined when superimposed
- Testing: (Equivalent acceptable) Inductance:HP4284A
  RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: -40℃ to +105℃
- Storage Temperature: -40℃ to +105℃
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance

Note:All specifications subject to change without notice.

SMD LINE FILTER

STR0903 SERIES

FEATURES:

- Approx. 0.5% stray inductance for differential-mode interference suppression
- Suitable for reflow soldering
- Design complies with EN 60938-2 (VDE 0565-2)
- RoHS-compatible

OPTIONS:

- Tape & Reel is Standard (Qty:350pcs)
- Bulk packaging Available for Smaller Quantities

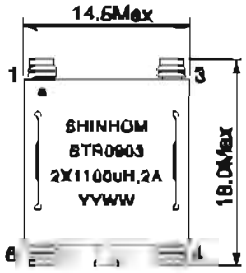
COMMON APPLCATIONS:

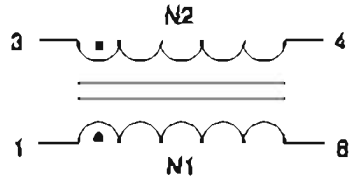
- Suppression of common-mode interference
- Compact electronic ballasts in lamps
- Compact switch-mode power supplies

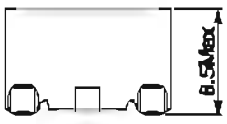
ELECTRICAL CHARACTERISTICS:

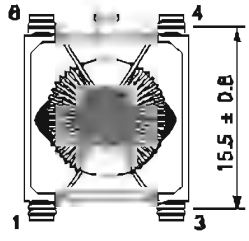
Part Number	L(1-6)(mH) @10KHz,0.1V +50%/-30%	LK(1-6)(uH) @10KHz,0.1V (4-5 short)max.	DCR (winding) (mΩ) max.	Rated Current (A)max.	Hi-Pot Vac,2S
STR0903-112Y	1.1	6	65	2.0	1500
STR0903-162Y	1.6	10	110	1.5	1500
STR0903-302Y	3.0	20	220	1.0	1500
STR0903-442Y	4.4	30	400	0.6	1500
STR0903-123Y	12	80	1100	0.3	1500
STR0903-223Y	22	130	1500	0.3	1500

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



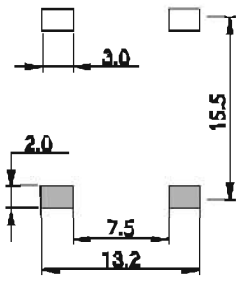






Bottom view

Layout recommendation

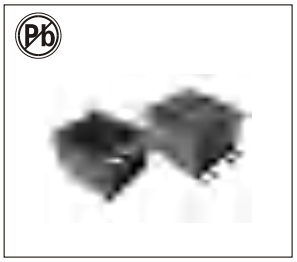


- Operating voltage: 250Vac
- IDC Max:Determined when superimposed
- Inductance test: HP4284A 10KHz 0.1V
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: -40℃ to +105℃
- Storage Temperature: -40℃ to +105℃
- Temperature rise 40℃ Max
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Date

Note:All specifications subject to change without notice.

COMMON MODE POWER LINE CHOKE

STR1206 SERIES



FEATURES:

- Approx. 0.7% stray inductance for differential–mode interference suppression
- Suitable for reflow soldering
- Design complies with EN 60938–2 (VDE 0565–2) and UL 1283
- RoHS–compatible

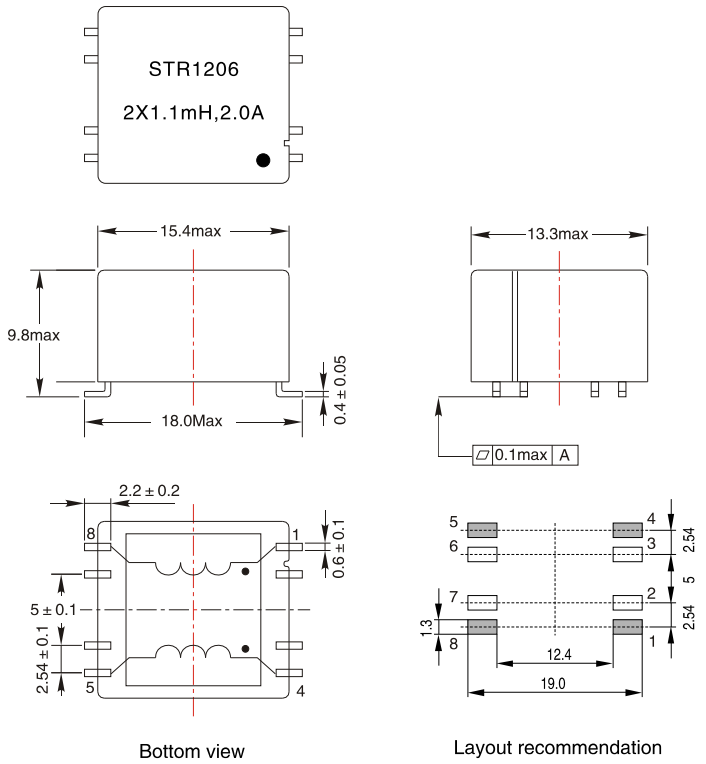
APPLICATIONS:

- Suppression of common–mode interferences
- Compact switch–mode power applications
- Compact electronic ballasts in lamps

ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) +50%/–30%	Lk(uH) Typ	Rated Current (A)	RDC(mΩ) Max
STR1206–112Y	1.1	6	2.0	65
STR1206–162Y	1.6	10	1.5	110
STR1206–302Y	3.0	20	1.0	220
STR1206–442Y	4.4	30	0.6	400
STR1206–123Y	12	80	0.3	1100
STR1206–223Y	22	130	0.3	1500

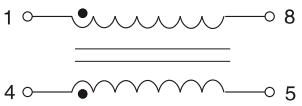
PHYSICAL CHARACTERISTICS:



Bottom view

Layout recommendation

Winding



Notes:

Rated voltage.....250Vac

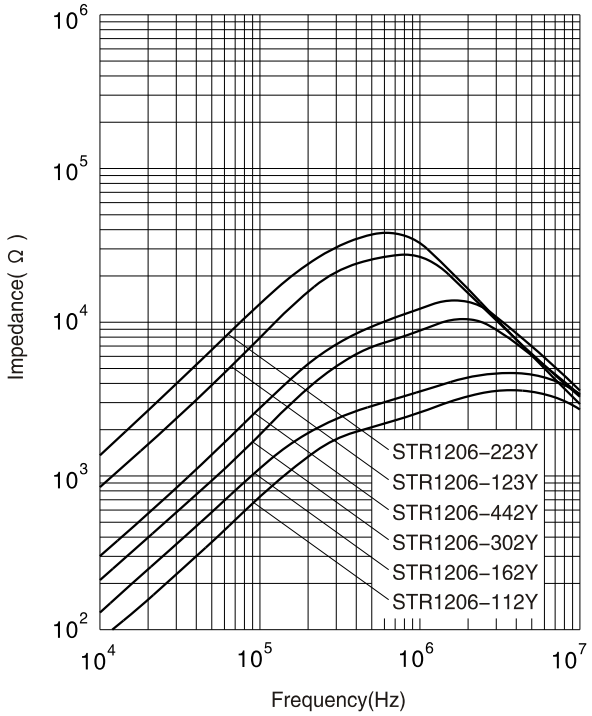
Frequency.....50/60Hz

Insulation test voltage..... 1500V

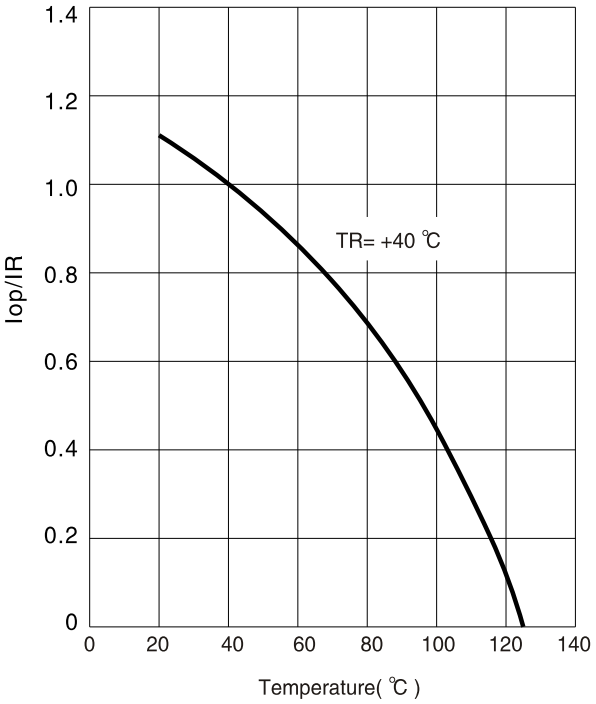
Operating temperature.....–25 ℃ to +125 ℃

Housing..... UL94 V–0

Impedance |Z| versus frequency F
measured with windings in parallel at +20℃
typical values

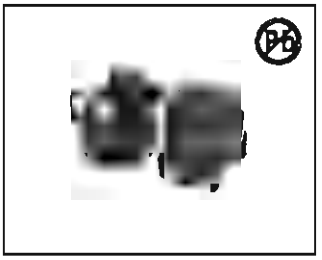


Current derating Iop/IR
versus ambient temperature TA



COMMON MODE CHOKE COIL

STR804 SERIES



FEATURES:

- Wire wound constructure common mode choke with best EMI suppression effect high impedance but very high rated current and low DCR.

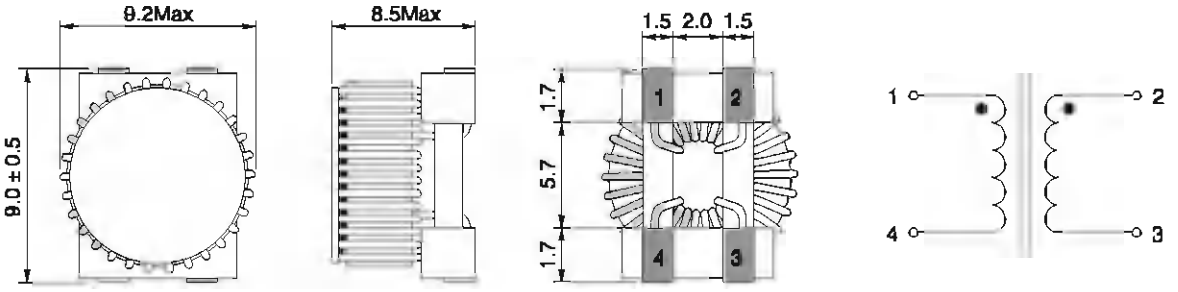
APPLICATIONS :

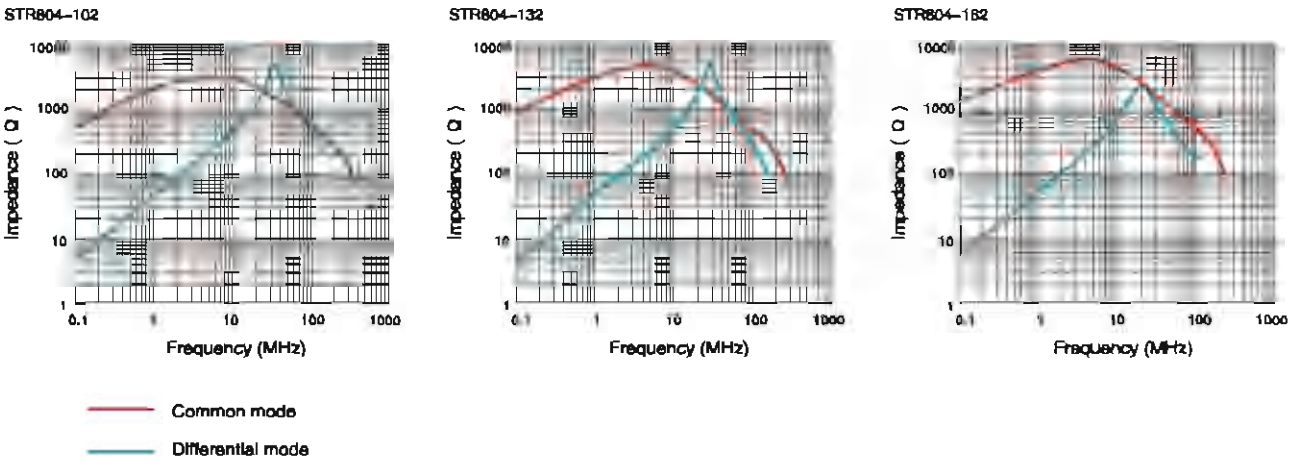
- Preventive measure against common mode noise radiation emissions from power line or else.
- Best for high current circuit such as car, wireless charging and power device design.

ELECTRICAL CHARACTERISTICS@25℃

Part Number	Impedance (Ω)Ref N1=N2	Test frequency	DCR (mΩ)Max	IDC (A)Max
STR804-102	1000	100KHz/0.25V	100	2.5
STR804-132	1300	100KHz/0.25V	115	2.4
STR804-162	1600	100KHz/0.25V	130	2.3

PHYSICAL CHARACTERISTICS & WINDING





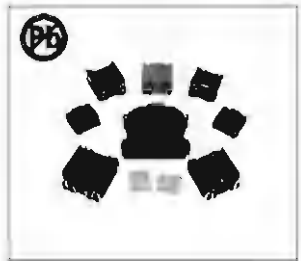
Note:

- Z test with HP4191A or HP4395A
- RDC:QuadTech 1880 Milliohmmeter
- Operating temperature: -40℃ to +105℃
- Storage Temperature: -40℃℃ to +105℃
- Resistance to soldering heat:260℃ for 10 seconds

Note:All specifications subject to change without notice.

SMT COMMON MODE CHOKES

STRF01 SERIES



FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI priformence
- Meets UL94V-0 flammability standard

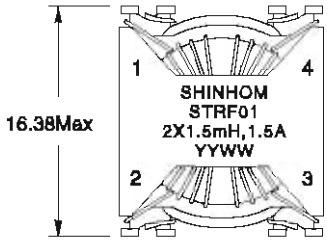
APPLICATIONS:

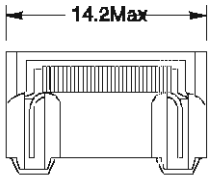
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

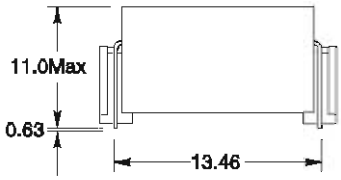
ELECTRICAL CHARACTERISTICS:

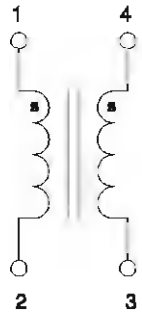
Part Number	L(0A) (uH)Min 10KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF01-651Y	650	3.6	50	1000
STRF01-801Y	800	1.5	60	1000
STRF01-152Y	1500	1.5	60	1000
STRF01-602Y	6000	1.0	450	1000
STRF01-153Y	15000	1.0	600	1000

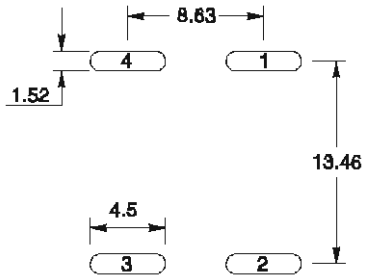
PHYSICAL CHARACTERISTICS & WINDING











Pad layout

NOTES:

Temperature Rise .....40℃ typical at IDC

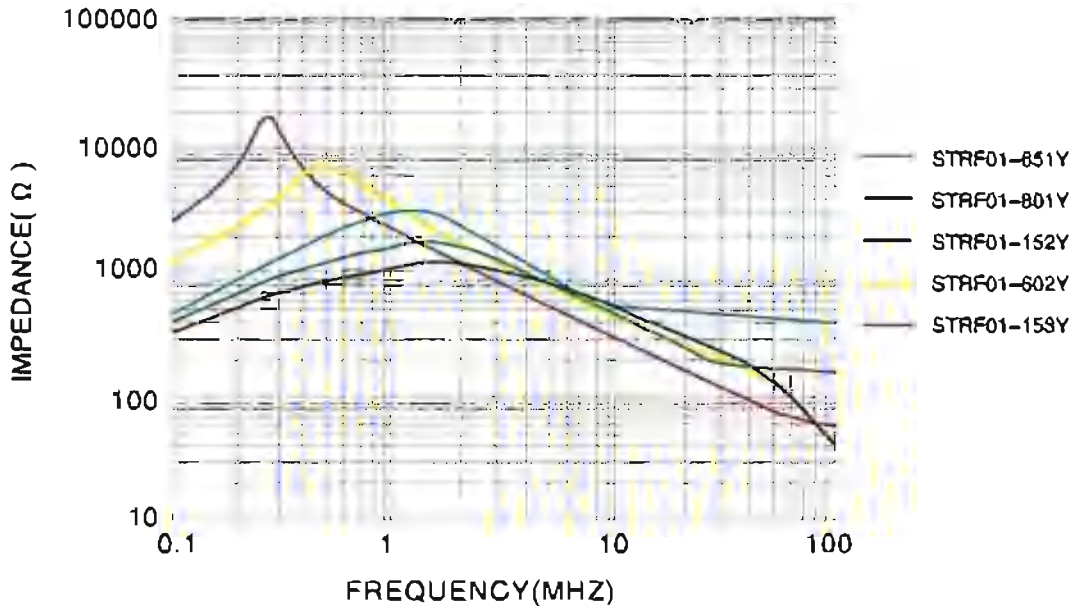
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

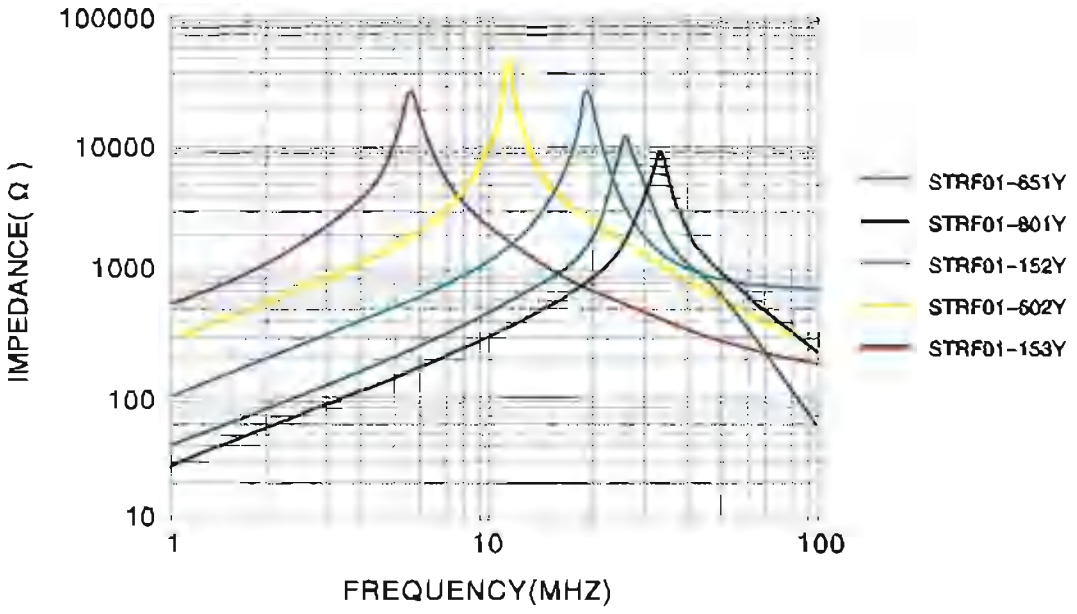
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE

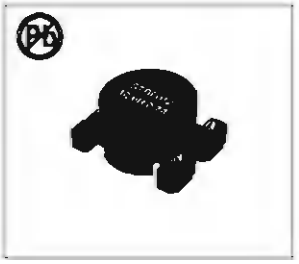


IMPEDANCE DIFFERENTIAL MODE



COMMON MODE POWER LINE CHOKE

STRF012 SERIES



FEATURES:

- SMD Power line choke
- Compact size
- Toroidal core with sector winding
- High attenuation of common mode interferences in low and middle frequency range

APPLICATIONS:

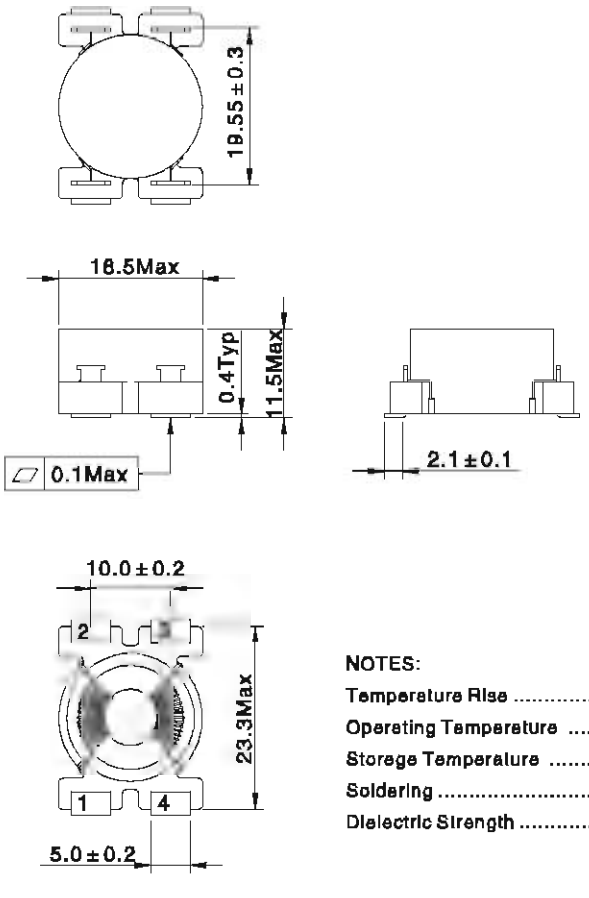
- Power electronics
- SMPS
- Mains filter

ELECTRICAL CHARACTERISTICS:

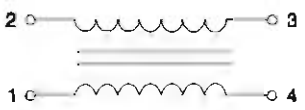
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
STRF012-701N	0.7	±30	4.0	0.03
STRF012-102N	1.0		2.0	0.06
STRF012-222N	2.2		2.0	0.10
STRF012-332N	3.3		1.5	0.15
STRF012-682N	6.8		1.0	0.30
STRF012-103N	10		0.7	0.55
STRF012-273N	27		0.4	1.20
STRF012-393N	39		0.4	1.70
STRF012-473N	47		0.3	2.80

PHYSICAL CHARACTERISTICS:

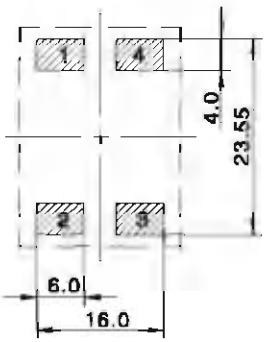
Dimensions 1



Winding



Pad layout



NOTES:

Temperature Rise .....40℃ typical at IDC

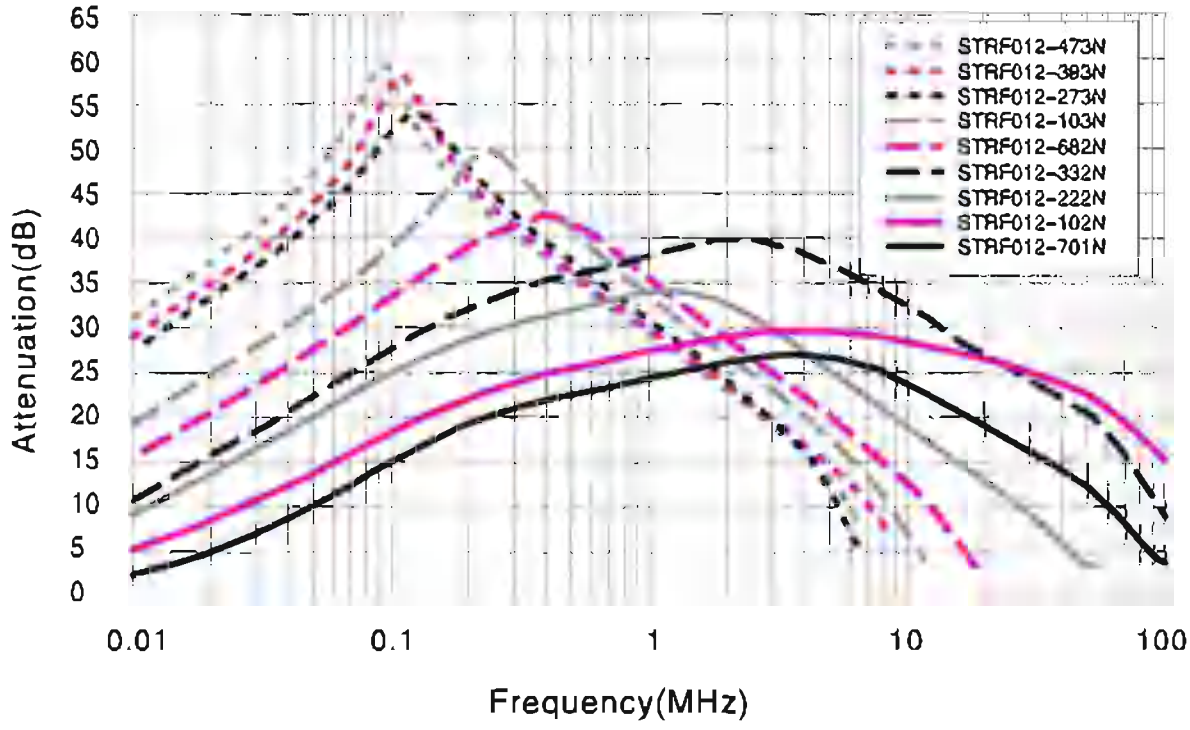
Operating Temperature .....-40℃ to +125℃(including self temperature rise)

Storage Temperature .....-40℃ to +125℃

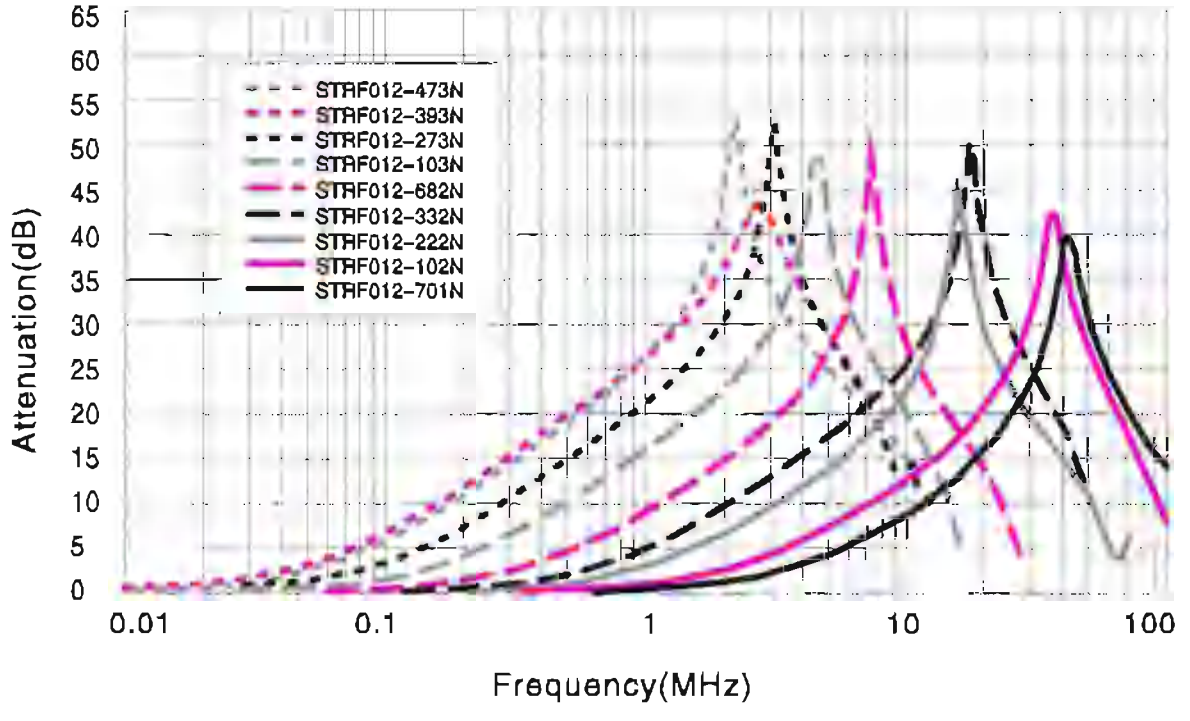
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

ATTENUATION COMMON MODE

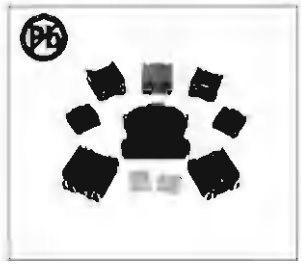


ATTENUATION DIFFERENTIAL MODE



SMT COMMON MODE CHOKES

STRF04 SERIES



FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI priformence
- Meets UL94V-0 flammability standard

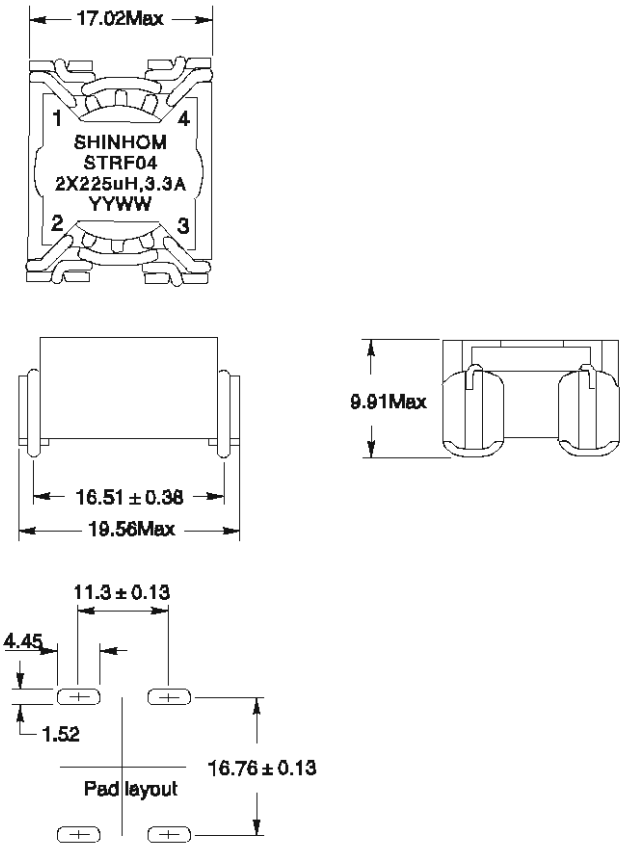
APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) ± 35% 10KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF04-221Y	225	3.3	60	1000
STRF04-591Y	590	5.6	21	1000
STRF04-771Y	770	4.7	40	1000
STRF04-132Y	1320	3.3	60	1000
STRF04-152Y	1470	2.8	80	1000

PHYSICAL CHARACTERISTICS & WINDING



NOTES:

Temperature Rise .....40℃ typical at IDC

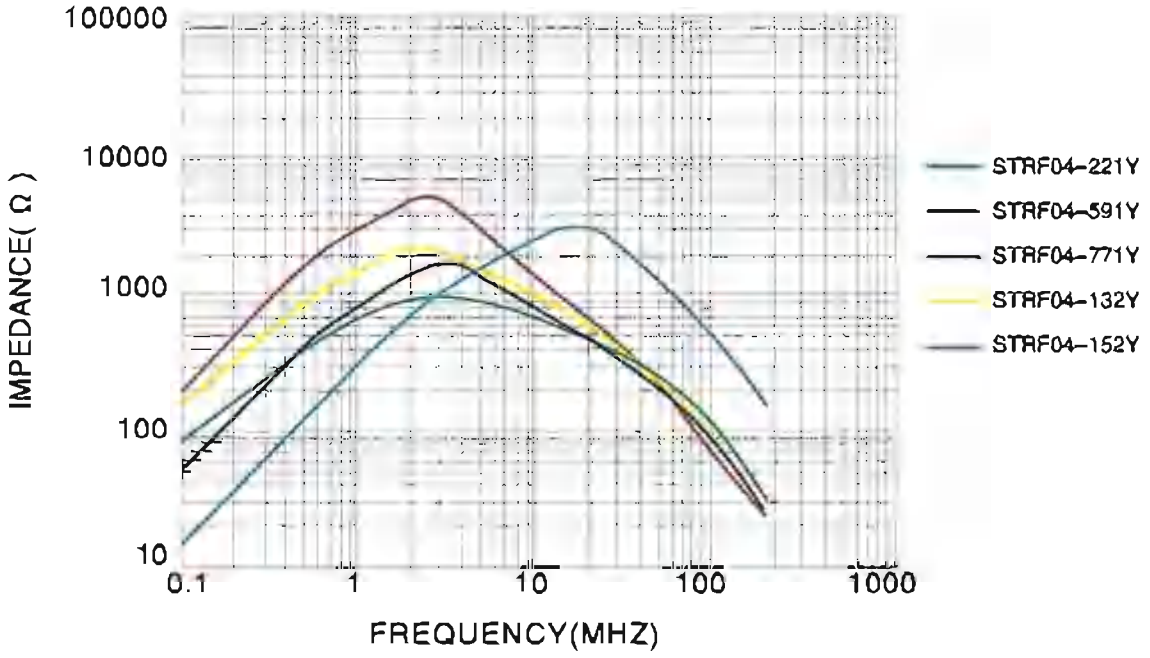
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

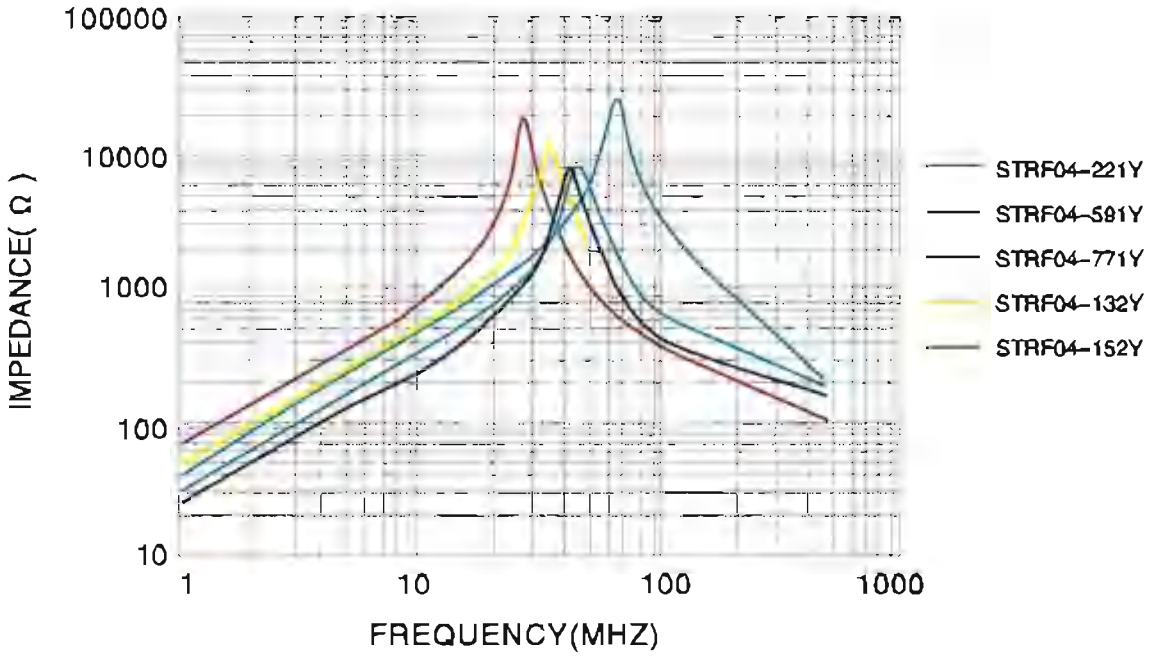
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE

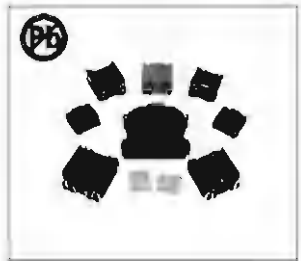


IMPEDANCE DIFFERENTIAL MODE



SMT COMMON MODE CHOKES

STRF06 SERIES



FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI priformence
- Meets UL94V-0 flammability standard

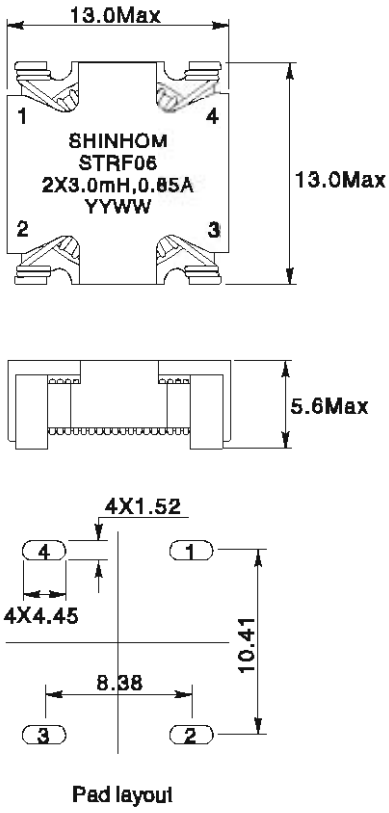
APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

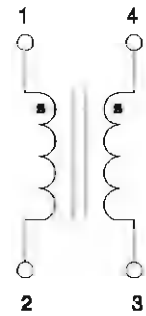
ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) ± 35% 100KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF06-681Y	680	1.63	110	1000
STRF06-112Y	1170	1.22	200	1000
STRF06-302Y	3000	0.85	280	1000
STRF06-392Y	3900	0.85	350	1000
STRF06-682Y	6800	0.30	700	1000

PHYSICAL CHARACTERISTICS & WINDING



Pad layout



NOTES:

Temperature Rise .....40℃ typical at IDC

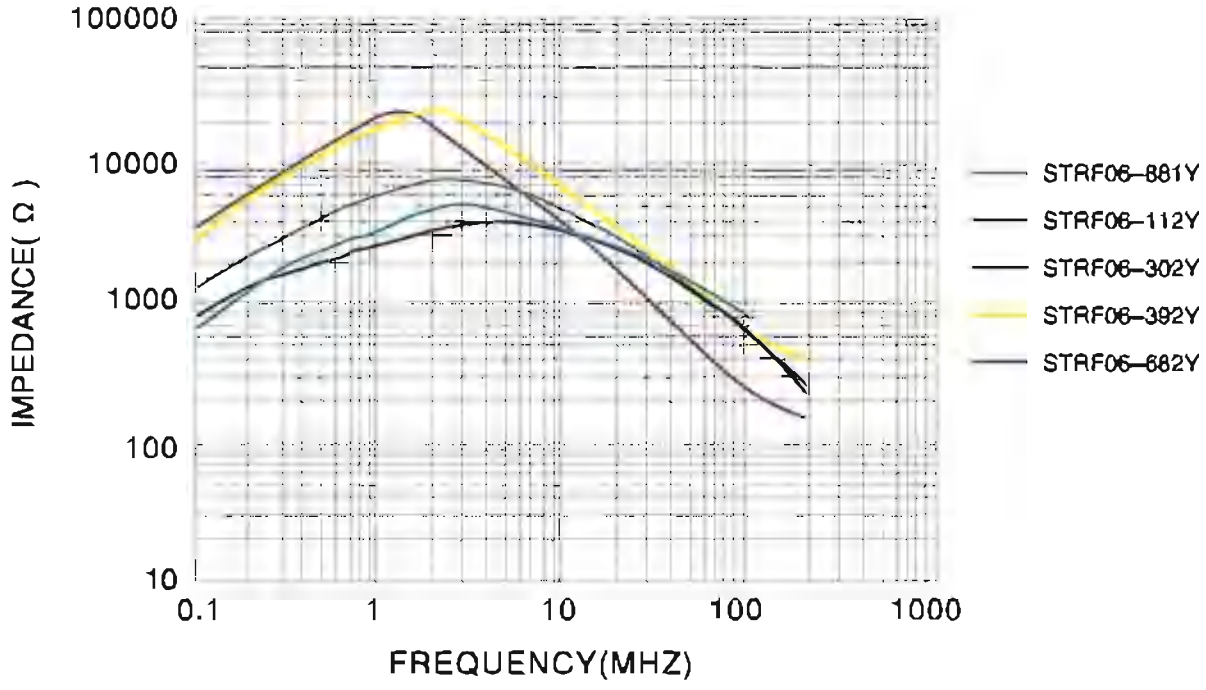
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

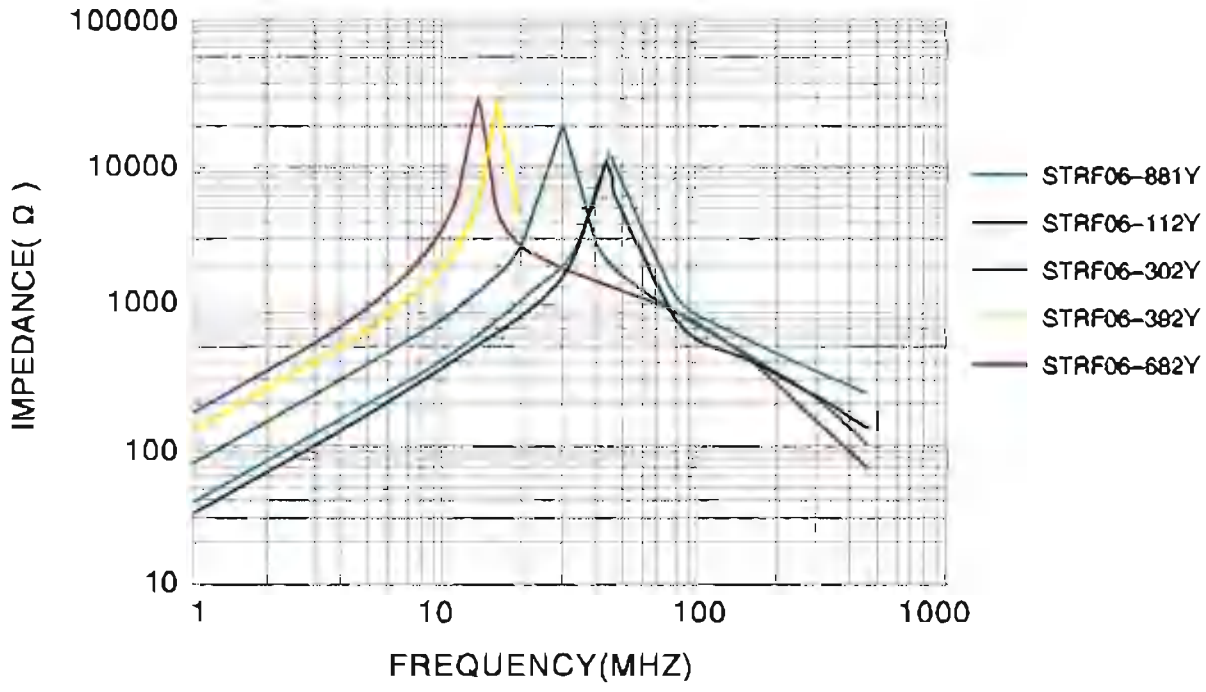
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE



IMPEDANCE DIFFERENTIAL MODE



COMMON MODE CHOKE

STRF07 SERIEIS

FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

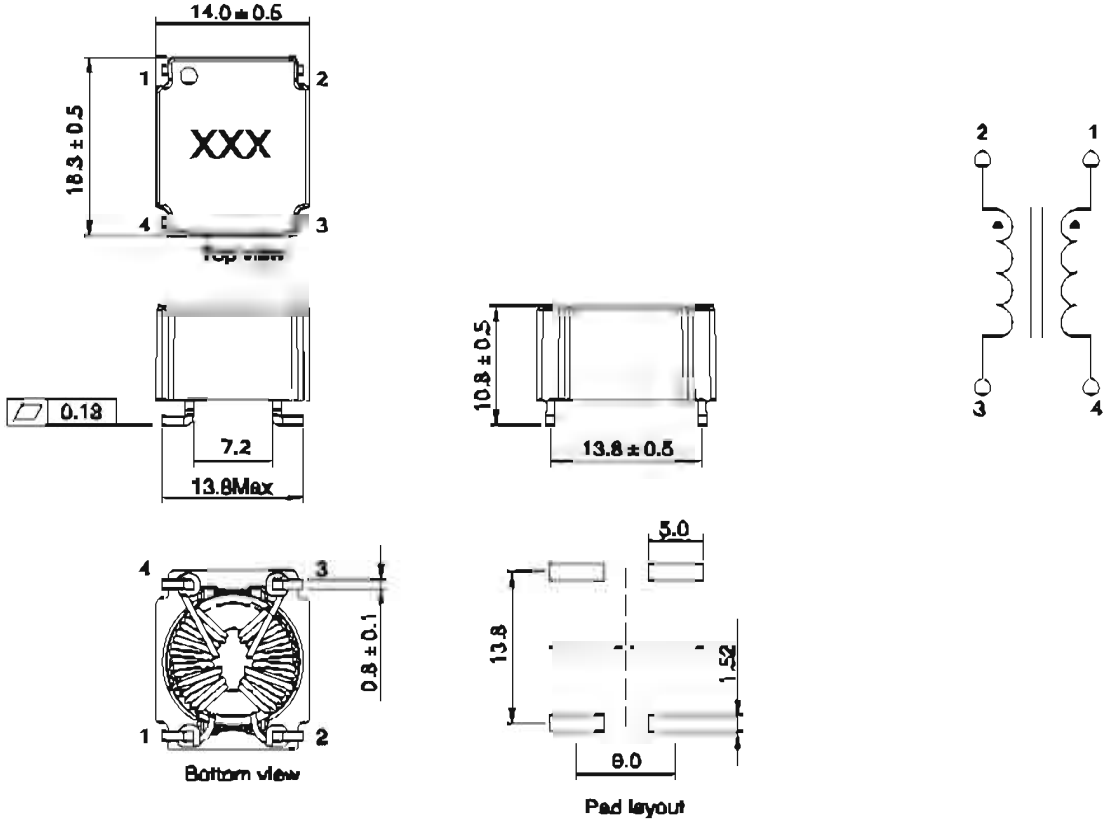
APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (mH) Min 10KHz,0.1V	DCR (mΩ)Max	IDC (A)Max	Hi-Pot (Vdc) 50Hz,1mA,1S
STRF07-651Y	0.65	20	3	1000
STRF07-801Y	0.8	33	2.4	1000
STRF07-152Y	1.5	70	1.8	1000
STRF07-802Y	8.0	200	0.9	1000
STRF07-103Y	10.0	500	0.5	1000

PHYSICAL CHARACTERISTICS



NOTES:

Temperature Rise .....40℃ typical at IDC

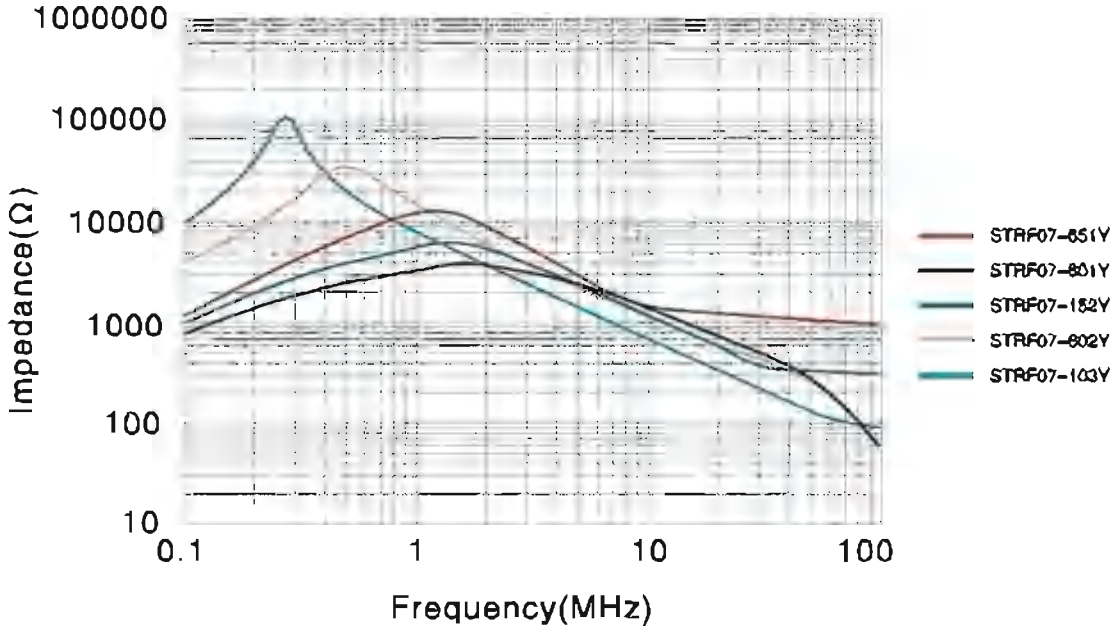
Operating Temperature .....-40℃ to +125℃(including self temperature rise)

Storage Temperature .....-40℃ to +125℃

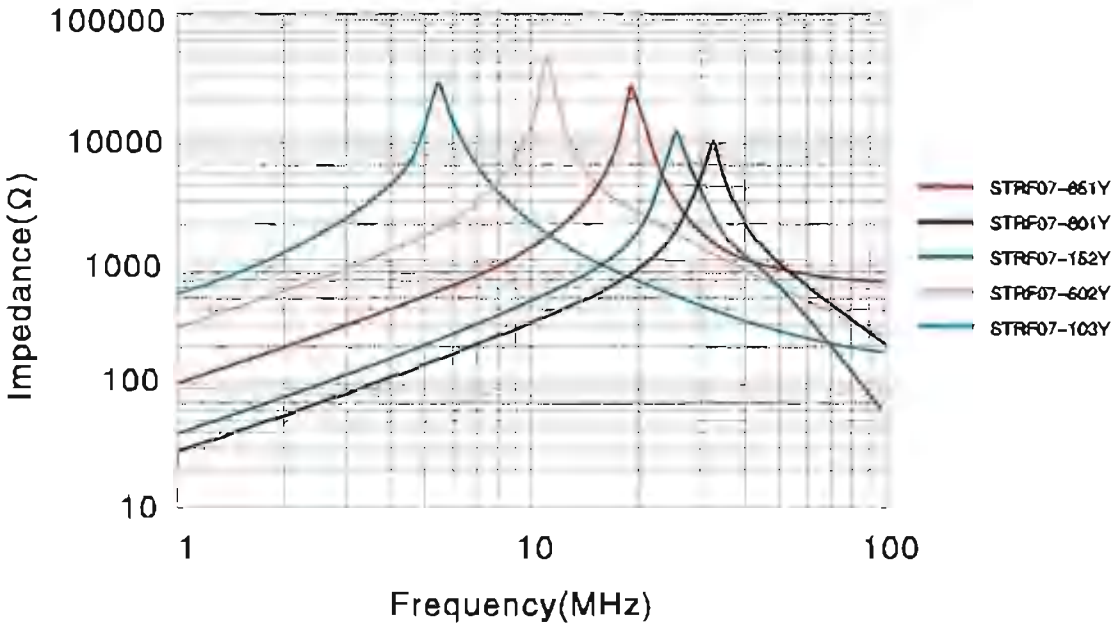
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE

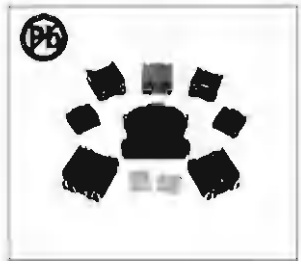


IMPEDANCE DIFFERENTIAL MODE



SMT COMMON MODE CHOKES

STRF16 SERIES



FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI priformence
- Meets UL94V-0 flammability standard

APPLICATIONS:

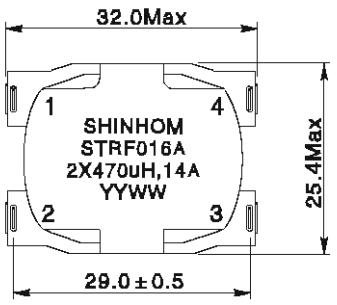
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

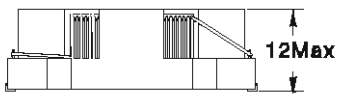
ELECTRICAL CHARACTERISTICS:

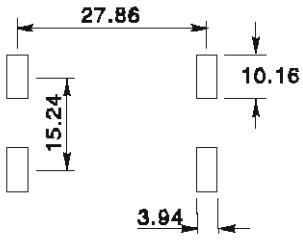
Part Number	L(0A) (uH) ± 35% 100KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF016□-131Y	135	26	3.5	1000
STRF016□-221Y	225	20	6.0	1000
STRF016□-471Y	470	14	8.0	1000
STRF016□-631Y	630	11.6	10	1000
STRF016□-821Y	820	7.0	15	1000

PHYSICAL CHARACTERISTICS & WINDING

STRF016A

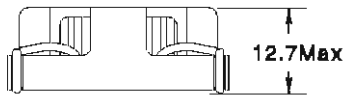


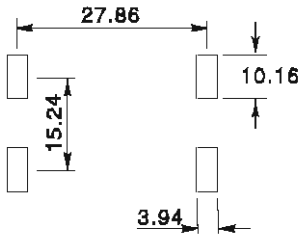




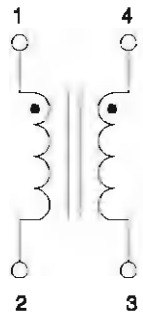
Suggested pad layout

STRF016B





Suggested pad layout



NOTES:

Temperature Rise .....40℃ typical at IDC

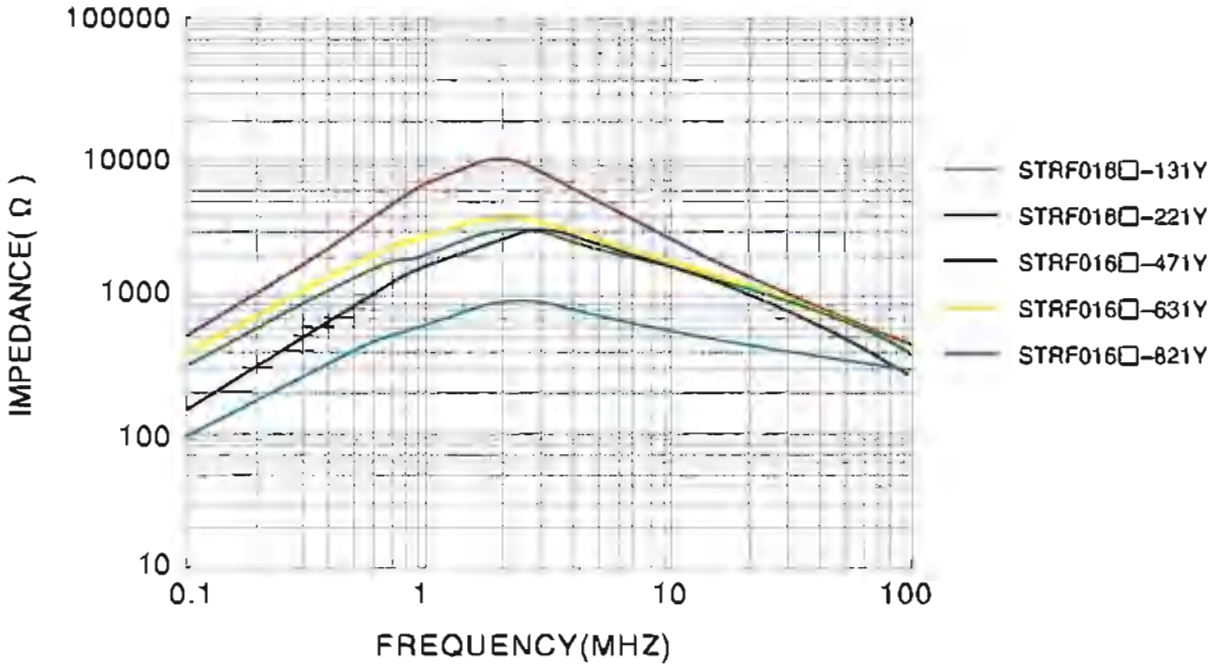
Operating Temperature .....-40℃ to +125℃(Including self temperature rise)

Storage Temperature .....-40℃ to +125℃

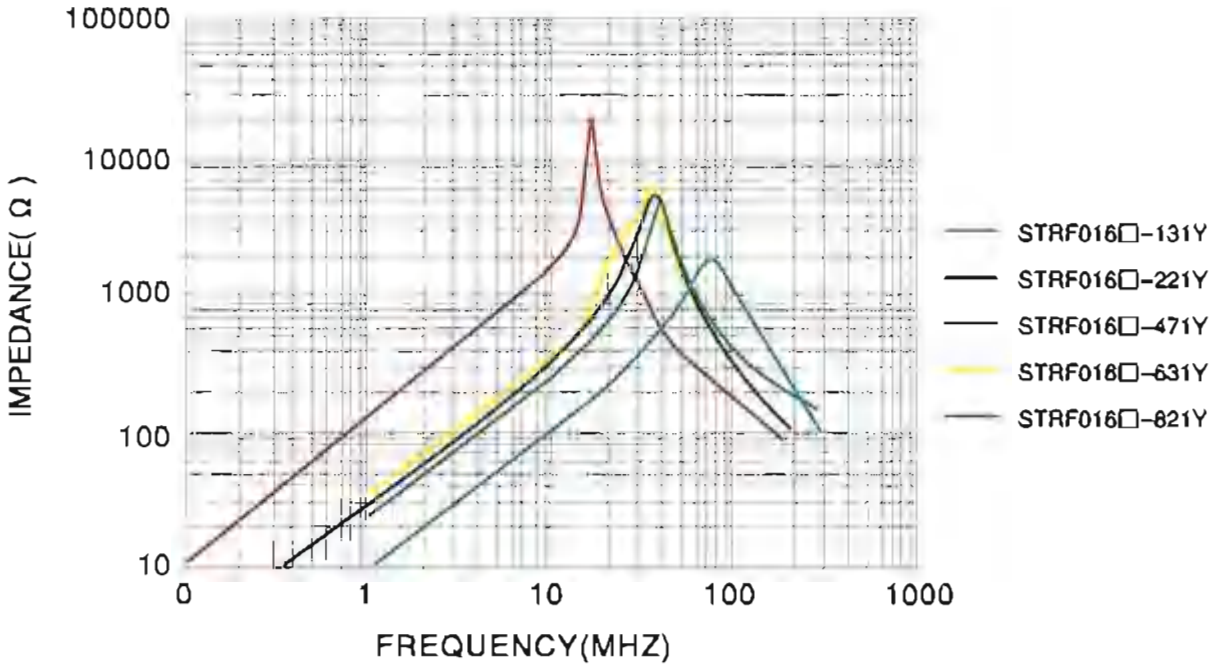
Soldering .....245℃, 5 seconds max

Dielectric Strength .....1000 Vrms between windings

IMPEDANCE COMMON MODE



IMPEDANCE DIFFERENTIAL MODE



WIRE–WOUND SMT POWER COMMON–MODE CHOKES

STRF2210 SERIES

FEATURES:

- Small size with high current
- Stable performance under load bias and high reliability
- High suppression of asymmetric interferences at both low and high frequency
- SMT Type with less height

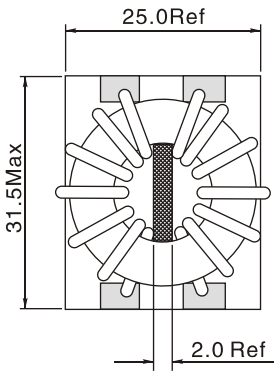
APPLCATIONS:

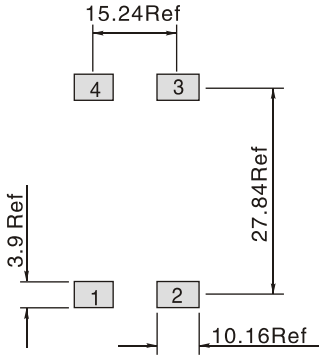
- Interferences suppression of common mode noise
- Power line filter
- Switch–mode power supplies

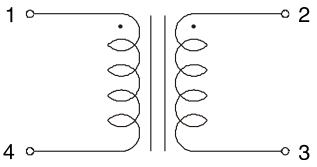
ELECTRICAL CHARACTERISTICS:

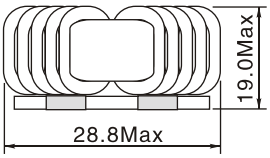
Part Number	Inductance (uH) +35%/–40%	Turns ratio 20KHz,1V N1:N2	DCR (mΩ) Max	Rated Current (A) Max	Hi–Pot 60Hz,10mA,2S (V)
STRF2210–680Y	68	1:1	0.56	50	1500
STRF2210–181Y	180	1:1	1.35	32	1500
STRF2210–321Y	320	1:1	2.5	28	1500
STRF2210–621Y	620	1:1	3.5	20	1500
STRF2210–801Y	800	1:1	5.3	16	1500
STRF2210–132Y	1300	1:1	10	11	1500
STRF2210–182Y	1800	1:1	14	9	1500

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





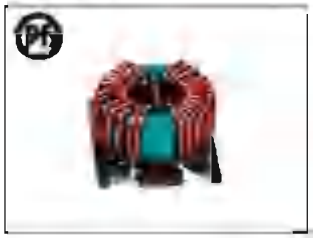




- Inductance Testing: 100KHz,0.1V
- Operating temperature: –40℃ to +125℃(Including self temperature rise)
- Storage Temperature: –40℃ to +125℃
- Resistance to soldering heat: 260℃ for 10 seconds

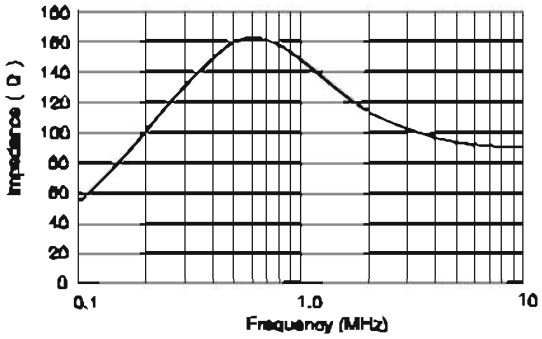
Note:All specifications subject to change without notice.

WIRE-WOUND SMT POWER COMMON-MODE CHOKES
STRF2210 SERIES

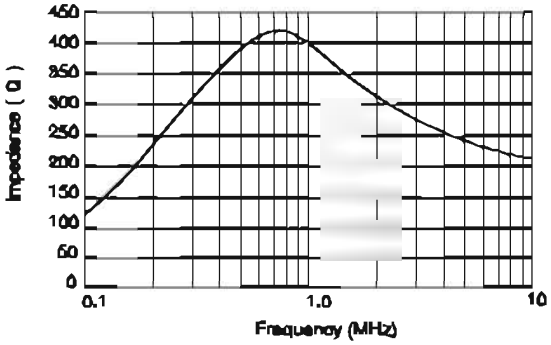


IMPEDANCE vs FREQUENCY:

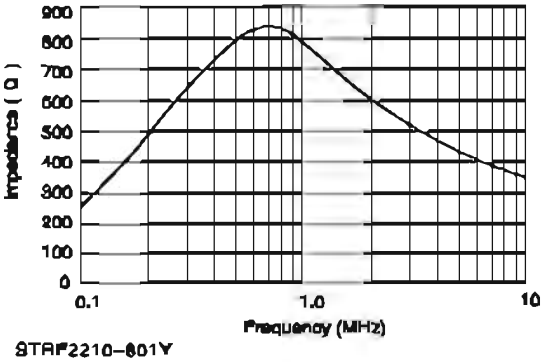
STRF2210-680Y



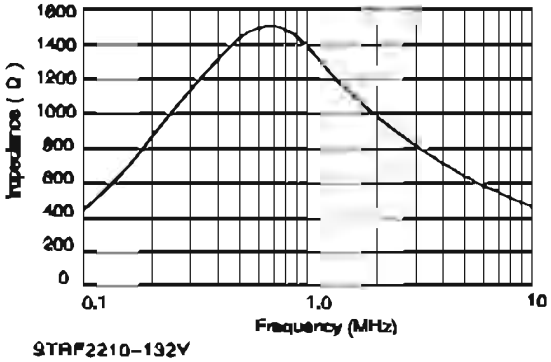
STRF2210-181Y



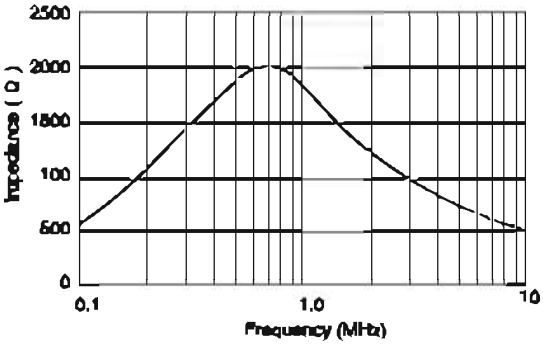
STRF2210-821Y



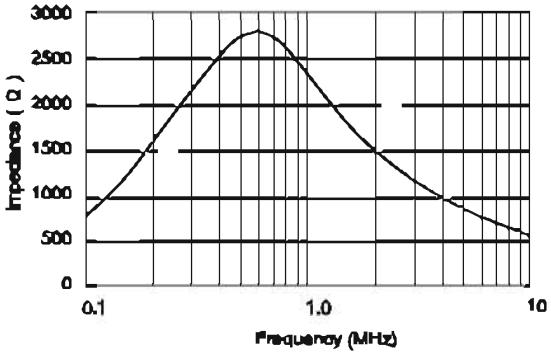
STRF2210-621Y



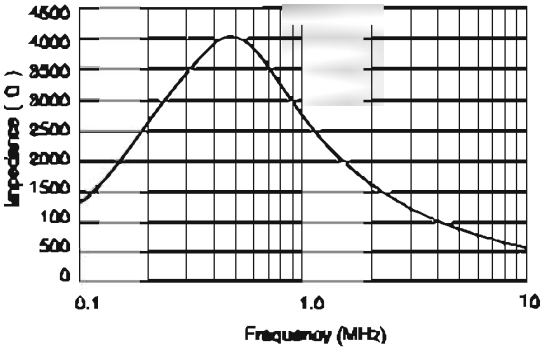
STRF2210-801Y

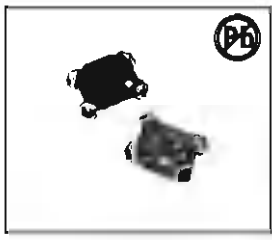


STRF2210-132Y



STRF2210-182Y





SMD COMMON MODE CHOKES

STS01 SERIES

FEATURES:

- Inductance range from 4.5uH to 205uH
- Current range up to 7.0 Amps
- High resonant frequency
- Meets UL94V-0 flammability standard
- Ferrite core material

OPTIONS:

- Packaging:Tape & Reel is standard Bulk packaging available for smaller quantities

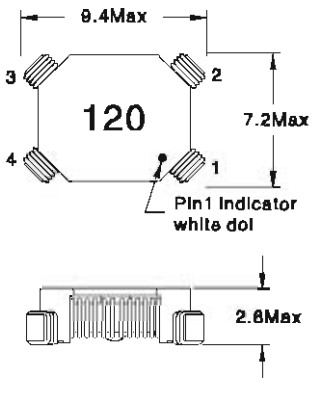
COMMON APPLICATIONS:

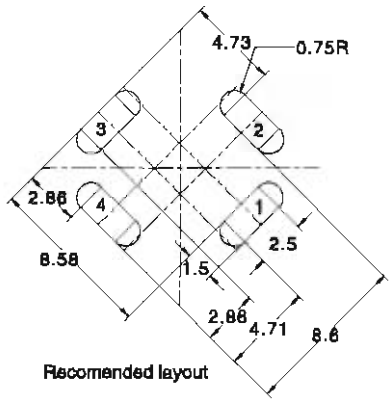
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) Min 100KHz,0.1V	Leakage inductance (uH) Typ	DCR (Ω) Typ	Irms (A) ΔT=40℃	Interwinding Capacitance (pF) Typ
STS01-4R5Y	4.5	0.05	0.0027	7.0	2.0
STS01-8R0Y	8	0.09	0.0040	5.7	2.1
STS01-120Y	12.6	0.14	0.0077	4.1	2.2
STS01-180Y	18	0.20	0.0089	3.8	2.3
STS01-250Y	25	0.28	0.01	3.6	2.4
STS01-320Y	32.8	0.36	0.0138	3.1	2.5
STS01-410Y	41.5	0.45	0.019	2.6	2.6
STS01-510Y	51.2	0.56	0.026	2.2	2.7
STS01-620Y	62	0.68	0.035	1.9	2.7
STS01-730Y	73.7	0.81	0.048	1.65	2.8
STS01-101Y	100	1.10	0.07	1.35	2.9
STS01-131Y	131	1.45	0.1	1.15	3.0
STS01-161Y	166	1.83	0.138	1.0	3.1
STS01-201Y	205	2.25	0.186	0.85	3.2

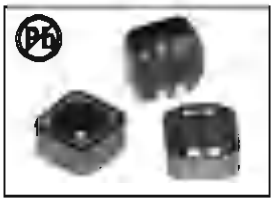
PHYSICAL CHARACTERISTICS & WINDING





NOTES:

1. Inductance tested at 100KHz,0.1V
2. DCR Measured at 20℃
3. Hi-Pot: 300V for 1min. between windings
4. Irms current: current for approx. a 40℃ temperature rise at an ambient temperature of 85℃
6. Operating temperature: -40℃ to +125℃
7. Storage temperature: -40℃ to +105℃



DUAL WINDING,SHIELDING INDUCTORS
SDRH0703D SERIES

Description:

- Four sizes of shielded drum core inductors
- Windings can be connected in series or parallel offering a broadrange of inductance and current ratings
- Surface Mount

Packaging:

- Supplied in tape and reel packaging 1350 (DRQ73),1100 (DRQ74) 600 (DRQ125),and 350 (DRQ127) per reel

Applications:

- As a transformer: SEPIC,flyback
- As an inductor:buck,boost,coupled inductor
- DC–DC converters
- VRM inductor for CPU and DDR power supplies
- Input and output filter chokes

ELECTRICAL CHARACTERISTICS:

Part Number	Rated Inductance (uH)	Parallel ratings					Series ratings				
		OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec	OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec
SDRH0703D–R33M	0.33	0.306	6.19	14.4	0.0074	1.98	1.224	3.10	7.18	0.0296	3.96
SDRH0703D–1R0M	1.0	0.992	5.25	7.97	0.0103	3.56	3.968	2.63	3.99	0.0411	7.12
SDRH0703D–1R5M	1.5	1.482	4.64	6.52	0.0132	4.36	5.928	2.32	3.26	0.0527	8.72
SDRH0703D–2R2M	2.2	2.070	4.11	5.52	0.0167	5.15	8.280	2.06	2.76	0.0669	10.3
SDRH0703D–3R3M	3.3	3.540	3.31	4.22	0.0259	6.73	14.16	1.66	2.11	0.1035	13.5
SDRH0703D–4R7M	4.7	4.422	3.09	3.78	0.0297	7.52	17.69	1.55	1.89	0.1188	15.0
SDRH0703D–6R8M	6.8	6.480	2.55	3.12	0.0435	9.11	25.92	1.28	1.56	0.1742	18.2
SDRH0703D–8R2M	8.2	8.930	2.19	2.88	0.0592	10.7	35.72	1.10	1.33	0.2368	21.4
SDRH0703D–100M	10	10.30	2.08	2.47	0.0658	11.5	41.20	1.04	1.24	0.2623	23.0
SDRH0703D–150M	15	15.01	1.83	2.05	0.0844	13.9	60.04	0.916	1.03	0.339	27.8
SDRH0703D–220M	22	22.65	1.62	1.67	0.107	17.0	90.60	0.811	0.83	0.429	34.0
SDRH0703D–330M	33	34.41	1.31	1.35	0.166	21.0	137.6	0.653	0.88	0.665	42.0
SDRH0703D–470M	47	48.62	1.08	1.14	0.241	24.9	194.5	0.542	0.57	0.965	49.8
SDRH0703D–680M	68	66.91	0.89	0.96	0.358	29.7	275.6	0.444	0.48	1.43	59.4
SDRH0703D–820M	82	80.37	0.86	0.89	0.384	32.1	321.5	0.430	0.44	1.54	64.2
SDRH0703D–101M	100	101.4	0.73	0.79	0.527	36.0	405.6	0.367	0.39	2.11	72.0
SDRH0703D–151M	150	150.9	0.58	0.65	0.851	44.0	603.6	0.289	0.32	3.41	88.0
SDRH0703D–221M	220	223.3	0.52	0.53	1.05	53.5	893.2	0.260	0.27	4.20	107
SDRH0703D–331M	330	325.3	0.42	0.44	1.58	64.5	1302	0.211	0.22	6.36	129
SDRH0703D–471M	470	465.8	0.35	0.37	2.38	77.2	1863	0.173	0.18	9.44	154
SDRH0703D–681M	680	676.5	0.29	0.31	3.47	93.1	2706	0.143	0.15	13.88	186
SDRH0703D–821M	820	821.7	0.27	0.28	3.93	103	3287	0.134	0.14	15.72	206
SDRH0703D–102M	1000	995.0	0.26	0.25	4.34	113	3980	0.128	0.13	17.36	228

1) Open Circuit Inductance Test Parameters:100kHz,0.25 Vrms,0.0 Adc Parallel:(1,2 –4,3) Series:(1–4) tie (2–3)

2) RMS current for an approximate DT of 40℃ without core loss. It is recommended that the temperature of the part not exceed 125℃.

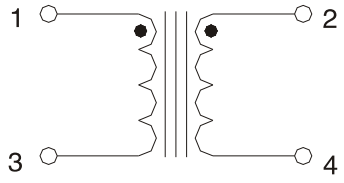
3) Peak current for approximately 30% roll–off at 20℃

4) DCR limits @ 20℃

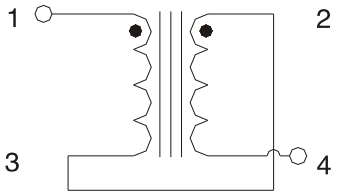
5) Applied Volt–Time product (V– μ S) across the inductor. This value represents the applied V– μ Sat 100KHz necessary to generate a core loss equal to 10% of the total losses for a 40° Ctemperature rise.

SCHEMATIC

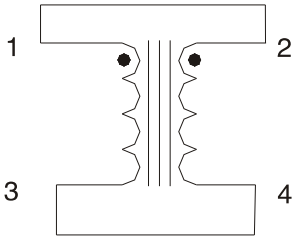
Dual inductor



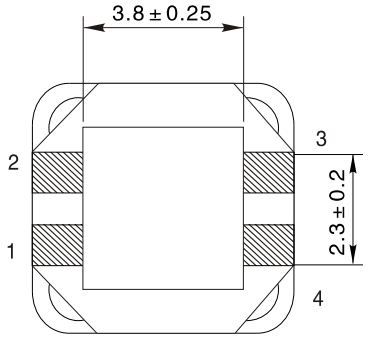
Series Mode

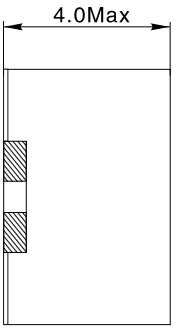


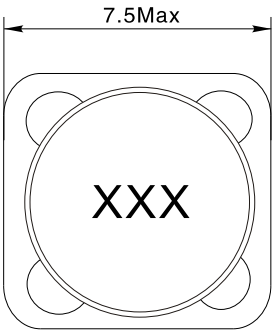
Parallel Mode

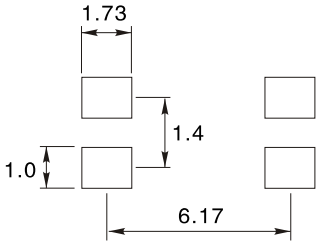


PHYSICAL CHARACTERISTICS(Dimensions:mm)









Recommended Land Pattern

Notes:

1.200Vac Isolation between windings

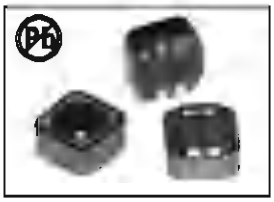
2.Storage temperature:–40℃ to +125℃

3.Operating temperature:–40℃ to +125℃ (range is application specific).

4.Solderreflow temperature:260℃ max. for 10 seconds max.

5.Turns Ratio (1:3):(2–4)=1:1

6. All specifications subject to change without notice.



DUAL WINDING,SHIELDING INDUCTORS

SDRH0704D SERIES

Description:

- Four sizes of shielded drum core inductors
- Windings can be connected in series or parallel offering a broadrange of inductance and current ratings
- Surface Mount

Packaging:

- Supplied in tape and reel packaging 1350 (DRQ73),1100 (DRQ74) 600 (DRQ125),and 350 (DRQ127) per reel

Applications:

- As a transformer: SEPIC,flyback
- As an inductor:buck,boost,coupled inductor
- DC–DC converters
- VRM inductor for CPU and DDR power supplies
- Input and output filter chokes

ELECTRICAL CHARACTERISTICS:

Part Number	Rated Inductance (uH)	Parallel ratings					Series ratings				
		OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec	OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec
SDRH0704D–R33M	0.33	0.294	6.20	16.4	0.0074	1.71	1.176	3.10	9.18	0.0295	3.42
SDRH0704D–1R0M	1.0	0.952	5.33	10.2	0.0100	3.08	3.808	2.66	5.10	0.0400	6.16
SDRH0704D–1R5M	1.5	1.422	4.96	8.35	0.0115	3.76	5.688	2.48	4.17	0.0461	7.52
SDRH0704D–2R2M	2.2	1.986	4.66	7.06	0.0130	4.45	7.944	2.33	3.53	0.0521	8.9
SDRH0704D–3R3M	3.3	3.396	3.94	5.40	0.0183	5.81	13.58	1.97	2.70	0.0732	11.6
SDRH0704D–4R7M	4.7	5.182	3.34	4.37	0.0254	7.18	20.73	1.67	2.19	0.102	14.4
SDRH0704D–6R8M	6.8	7.344	2.60	3.67	0.0418	8.56	29.38	1.30	1.84	0.167	17.1
SDRH0704D–8R2M	8.2	8.566	2.53	3.40	0.0441	9.23	34.28	1.27	1.70	0.177	18.5
SDRH0704D–100M	10	9.882	2.41	3.17	0.0489	9.92	39.53	1.20	1.58	0.196	19.8
SDRH0704D–150M	15	16.09	2.11	2.46	0.0637	12.7	64.36	1.05	1.24	0.255	25.4
SDRH0704D–220M	22	21.73	1.75	2.13	0.0925	14.7	86.92	0.874	1.07	0.371	29.4
SDRH0704D–330M	33	33.01	1.41	1.73	0.143	18.1	132.0	0.702	0.87	0.574	36.2
SDRH0704D–470M	47	49.64	1.15	1.41	0.216	22.2	198.6	0.573	0.71	0.865	44.4
SDRH0704D–680M	68	69.67	1.03	1.19	0.265	26.3	278.7	0.517	0.60	1.06	52.6
SDRH0704D–820M	82	80.95	0.91	1.11	0.345	28.4	323.8	0.453	0.55	1.38	56.8
SDRH0704D–101M	100	101.6	0.86	0.99	0.383	31.6	406.4	0.430	0.49	1.53	63.8
SDRH0704D–151M	150	160.0	0.69	0.81	0.591	38.6	600.0	0.348	0.41	2.37	77.2
SDRH0704D–221M	220	227.0	0.56	0.66	0.907	47.5	908.0	0.279	0.33	3.63	95
SDRH0704D–331M	330	335.6	0.45	0.54	1.41	57.8	1342	0.224	0.27	5.66	116
SDRH0704D–471M	470	466.3	0.40	0.46	1.74	68.1	1861	0.202	0.23	6.97	136
SDRH0704D–681M	680	671.2	0.33	0.38	2.68	81.7	2685	0.166	0.19	10.3	163
SDRH0704D–821M	820	812.7	0.31	0.35	2.93	89.9	3251	0.156	0.17	11.7	180
SDRH0704D–102M	1000	1008	0.27	0.31	3.89	100	4036	0.135	0.16	15.6	200

1) Open Circuit Inductance Test Parameters:100kHz,0.25 Vrms,0.0 Adc Parallel:(1,2 –4,3) Series:(1–4) tie (2–3)

2) RMS current for an approximate DT of 40℃ without core loss. It is recommended that the temperature of the part not exceed 125℃.

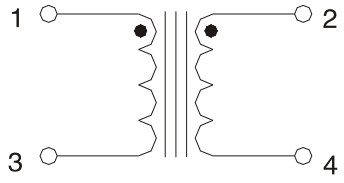
3) Peak current for approximately 30% roll–off at 20℃

4) DCR limits @ 20℃

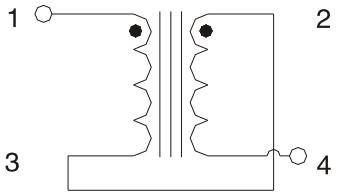
5) Applied Volt–Time product (V– μ S) across the Inductor. This value represents the applied V– μ Sat 100KHz necessary to generate a core loss equal to 10% of the total losses for a 40° Ctemperature rise.

SCHEMATIC

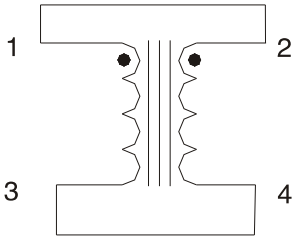
Dual inductor



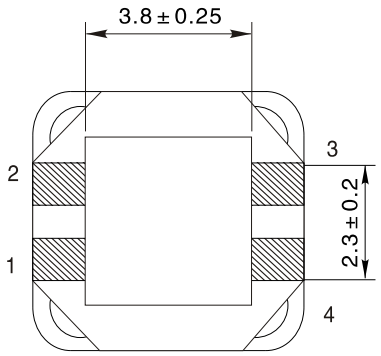
Series Mode

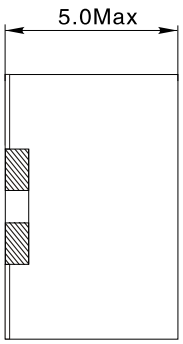


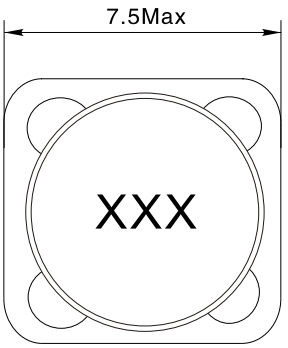
Parallel Mode

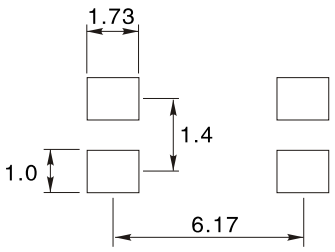


PHYSICAL CHARACTERISTICS(Dimensions:mm)









Recommended Land Pattern

Notes:

1.200Vac Isolation between windings

2.Storage temperature:–40℃ to +125℃

3.Operating temperature:–40℃ to +125℃ (range is application specific).

4.Solderreflow temperature:260℃ max. for 10 seconds max.

5.Turns Ratio (1:3):(2–4)=1:1

6. All specifications subject to change without notice.

COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH1048D SERIES

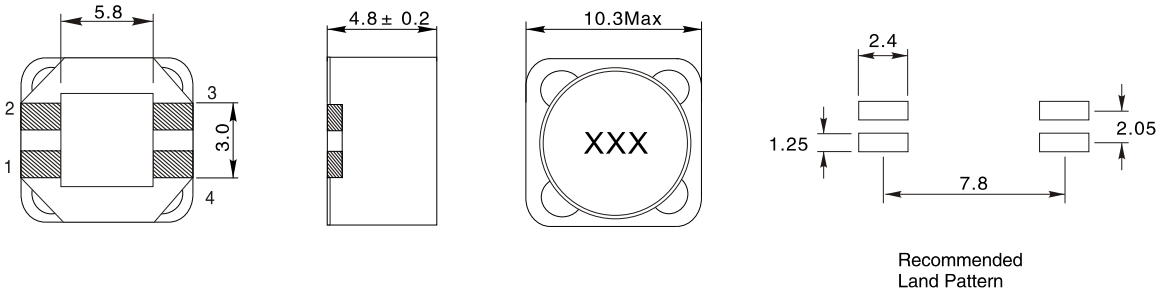
FEATURES:

- Only 4.8 mm high and 10.3 mm square
- AEC–Q200 Grade 1 (–40℃ to +125℃)
- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Up to 200 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

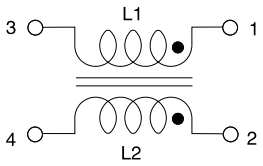
ELECTRICAL CHARACTERISTICS:

Partnumber	Common mode impedance Max (KΩ)	Cutoff frequency (MHz)	Inductance (μH)		DCR max (Ω)	Isolation (Vrms)	Irms (A)
			Min	Nom			
SDRH1048D–2R2N	3.49@71 MHz	200	1.54	2.2	0.019	200	2.4
SDRH1048D–100M	10.1@27 MHz	97	8.00	10	0.053	200	1.5
SDRH1048D–220M	17.0@17 MHz	44	17.6	22	0.098	200	1.3
SDRH1048D–470M	32.4 @12 MHz	29	37.6	47	0.208	200	1.1
SDRH1048D–680M	52.2 @9.3 MHz	38	54.4	68	0.297	200	1.0
SDRH1048D–101M	58.3 @7.4 MHz	19	80.0	100	0.387	200	0.85
SDRH1048D–221K	87.9 @5.0 MHz	16	198	220	0.840	200	0.62

PHYSICAL CHARACTERISTICS & WINDING:



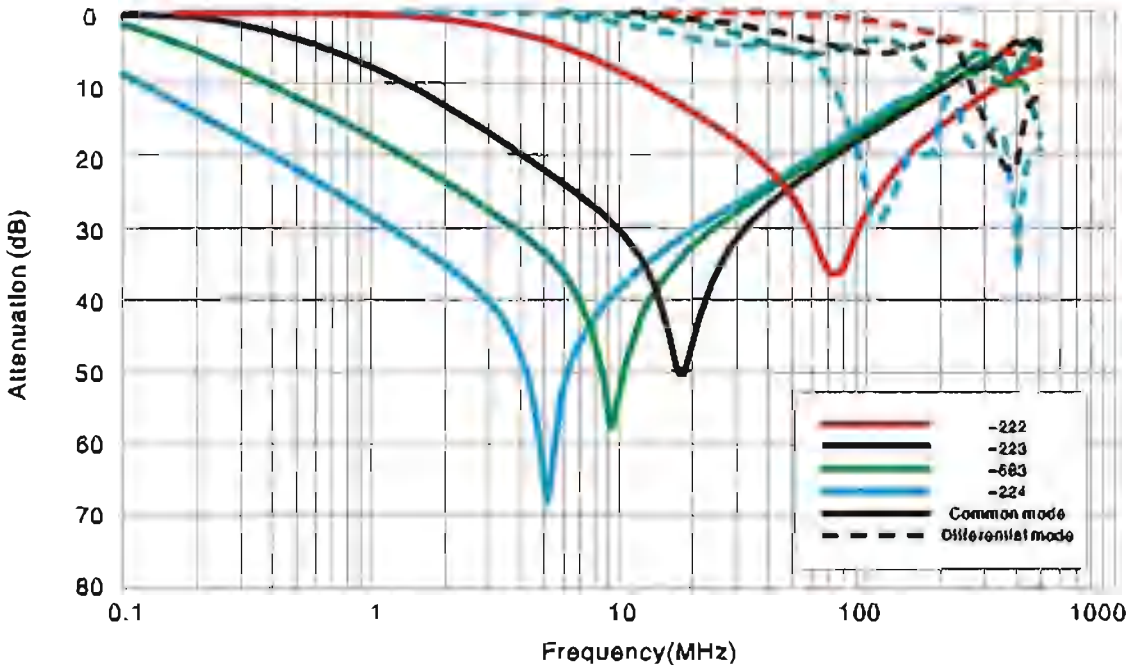
Recommended
Land Pattern



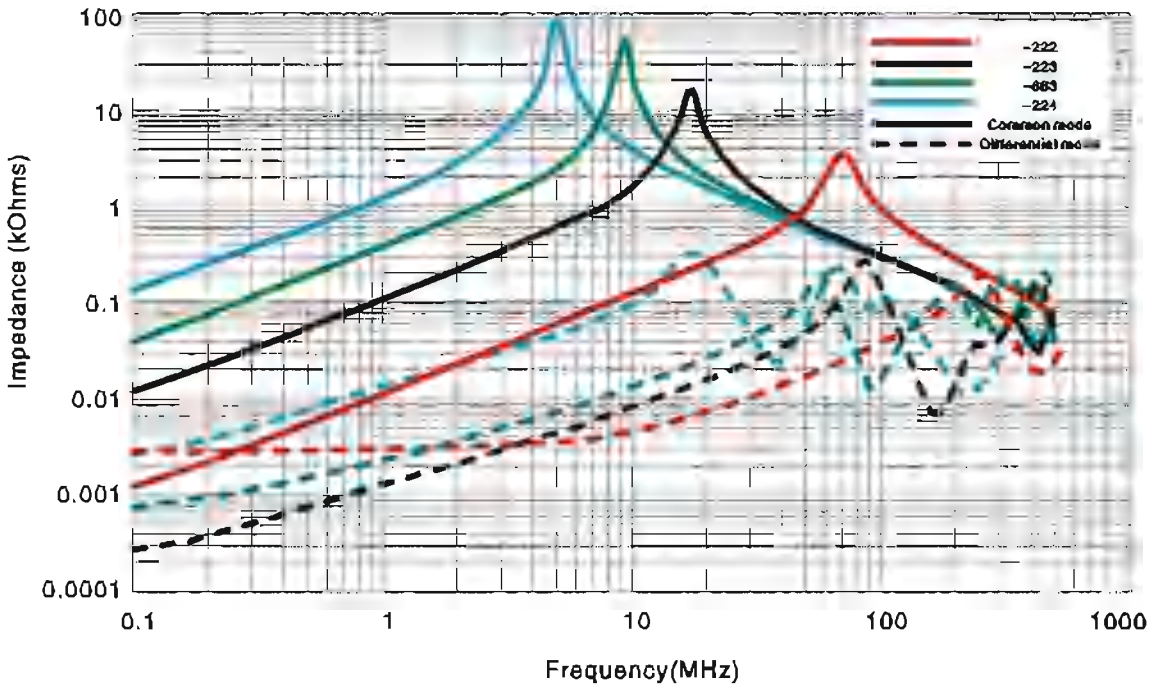
1. Frequency at which the differential mode attenuation equals –3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding–to–winding isolation 500 Vrms, one minute
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +85 ℃ with Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

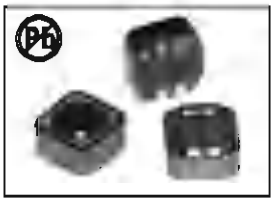
PERFORMANCE CURVE:

TYPICAL ATTENUATION (REF: 50 OHMS)



TYPICAL IMPEDANCE VS FREQUENCY





DUAL WINDING,SHIELDING INDUCTORS

SDRH1205D SERIES

Description:

- Four sizes of shielded drum core inductors
- Windings can be connected in series or parallel offering a broadrange of inductance and current ratings
- Surface Mount

Packaging:

- Supplied in tape and reel packaging 1350 (DRQ73),1100 (DRQ74) 600 (DRQ125),and 350 (DRQ127) per reel

Applications:

- As a transformer: SEPIC,flyback
- As an inductor:buck,boost,coupled inductor
- DC–DC converters
- VRM inductor for CPU and DDR power supplies
- Input and output filter chokes

ELECTRICAL CHARACTERISTICS:

Part Number	Rated Inductance (uH)	Parallel ratings					Series ratings				
		OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec	OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec
SDRH1205D–R47M	0.47	0.456	17.6	33.0	0.0018	3.17	1.824	8.80	16.5	0.0078	6.34
SDRH1205D–1R0M	1.0	0.894	15.0	23.6	0.0024	4.43	3.576	7.51	11.8	0.0096	8.86
SDRH1205D–1R5M	1.5	1.478	13.8	18.3	0.0029	5.70	5.912	6.89	9.15	0.0114	11.40
SDRH1205D–2R2M	2.2	2.208	10.9	15.0	0.0045	6.97	8.832	5.46	7.50	0.0182	13.9
SDRH1205D–3R3M	3.3	3.084	9.26	12.7	0.0063	8.23	12.34	4.63	6.35	0.0253	16.5
SDRH1205D–4R7M	4.7	5.274	7.18	9.71	0.0105	10.8	21.10	3.59	4.86	0.0420	21.6
SDRH1205D–6R8M	6.8	6.586	6.64	8.68	0.0123	12.0	26.35	3.32	4.34	0.0492	24.0
SDRH1205D–8R2M	8.2	8.048	5.54	7.86	0.0178	13.3	32.19	2.77	3.93	0.0705	26.6
SDRH1205D–100M	10	9.654	5.35	7.17	0.0189	14.6	38.62	2.67	3.59	0.0757	29.2
SDRH1205D–150M	15	15.35	4.27	5.69	0.0298	18.4	61.40	2.13	2.85	0.0120	36.8
SDRH1205D–220M	22	22.36	3.70	4.71	0.0396	22.2	89.44	1.84	2.36	0.159	44.4
SDRH1205D–330M	33	33.74	3.28	3.84	0.0505	27.2	135.0	1.64	1.92	0.203	54.4
SDRH1205D–470M	47	47.47	2.71	3.24	0.0740	32.3	189.9	1.35	1.62	0.297	64.6
SDRH1205D–680M	68	67.91	2.22	2.70	0.101	38.6	271.6	1.11	1.35	0.440	77.2
SDRH1205D–820M	82	86.89	2.05	2.39	0.128	43.7	347.6	1.03	1.20	0.516	87.4
SDRH1205D–101M	100	102.7	1.78	2.20	0.170	47.5	410.8	0.892	1.10	0.682	95.0
SDRH1205D–151M	150	161.1	1.48	1.81	0.248	57.6	604.4	0.739	0.905	0.991	115.2
SDRH1205D–221M	220	216.8	1.19	1.51	0.384	69.0	867.2	0.594	0.755	1.54	138
SDRH1205D–331M	330	332.6	1.06	1.22	0.482	85.5	1330	0.530	0.610	1.93	171
SDRH1205D–471M	470	473.1	0.87	1.02	0.716	102	1892	0.434	0.510	2.87	204
SDRH1205D–681M	680	679.8	0.70	0.85	1.10	122	2719	0.350	0.425	4.42	244
SDRH1205D–821M	820	826.0	0.60	0.77	1.49	135	3312	0.301	0.385	5.96	270
SDRH1205D–102M	1000	1008	0.57	0.70	1.69	149	4032	0.283	0.350	6.76	298

1) Open Circuit Inductance Test Parameters:100kHz,0.25 Vrms,0.0 Adc Parallel:(1,2 –4,3) Series:(1–4) tie (2–3)

2) RMS current for an approximate DT of 40℃ without core loss. It is recommended that the temperature of the part not exceed 125℃.

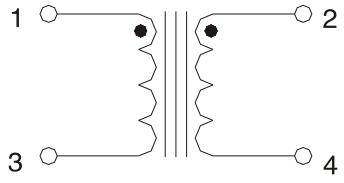
3) Peak current for approximately 30% roll–off at 20℃

4) DCR limits @ 20℃

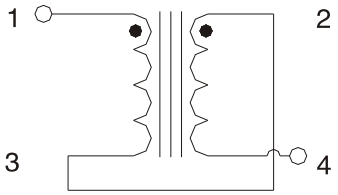
5) Applied Volt–Time product (V– μ S) across the inductor. This value represents the applied V– μ Sat 100KHz necessary to generate a core loss equal to 10% of the total losses for a 40° Ctemperature rise.

SCHEMATIC

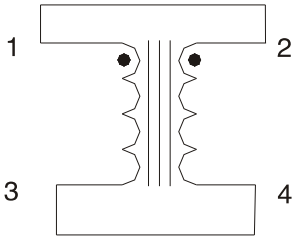
Dual inductor



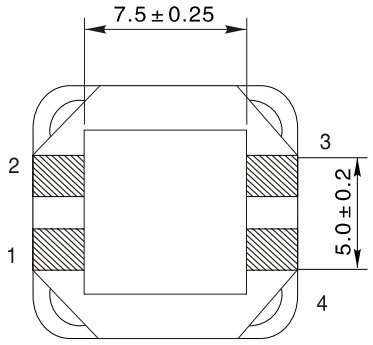
Series Mode

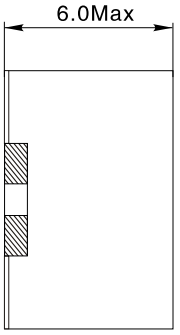


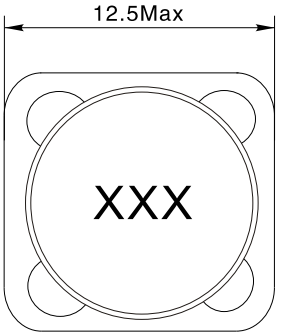
Parallel Mode

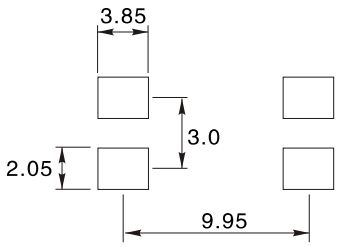


PHYSICAL CHARACTERISTICS(Dimensions:mm)









Recommended Land Pattern

Notes:

1.200Vac Isolation between windings

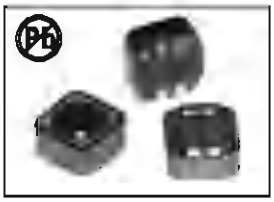
2.Storage temperature:–40℃ to +125℃

3.Operating temperature:–40℃ to +125℃ (range is application specific).

4.Solderreflow temperature:260℃ max. for 10 seconds max.

5.Turns Ratio (1:3):(2–4)=1:1

6. All specifications subject to change without notice.



DUAL WINDING,SHIELDING INDUCTORS

SDRH1207D SERIES

Description:

- Four sizes of shielded drum core inductors
- Windings can be connected in series or parallel offering a broadrange of inductance and current ratings
- Surface Mount

Packaging:

- Supplied in tape and reel packaging 1350 (DRQ73),1100 (DRQ74) 600 (DRQ125),and 350 (DRQ127) per reel

Applications:

- As a transformer: SEPIC,flyback
- As an inductor:buck,boost,coupled inductor
- DC–DC converters
- VRM inductor for CPU and DDR power supplies
- Input and output filter chokes

ELECTRICAL CHARACTERISTICS:

Part Number	Rated Inductance (uH)	Parallel ratings					Series ratings				
		OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u-sec	OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u-sec
SDRH1207D-R47M	0.47	0.419	17.9	58.0	0.00195	3.50	1.678	8.94	28	0.0078	7.00
SDRH1207D-1R0M	1.0	0.821	15.5	40.0	0.00261	4.90	3.284	7.74	20	0.0104	9.80
SDRH1207D-1R5M	1.5	1.357	13.5	31.1	0.00341	6.30	5.428	6.77	15.6	0.0137	12.60
SDRH1207D-2R2M	2.2	2.027	12.5	25.5	0.00373	7.70	8.108	6.23	12.7	0.0161	15.4
SDRH1207D-3R3M	3.3	2.831	10.4	21.5	0.00567	9.10	11.32	5.23	10.6	0.0229	18.2
SDRH1207D-4R7M	4.7	4.841	8.25	16.5	0.00917	11.9	19.36	4.13	8.24	0.0367	23.8
SDRH1207D-6R8M	6.8	7.387	7.34	13.3	0.0116	14.7	29.55	3.67	6.67	0.0465	29.4
SDRH1207D-8R2M	8.2	8.861	6.32	12.2	0.0157	16.1	35.44	3.16	6.09	0.0627	32.2
SDRH1207D-100M	10	10.47	6.04	11.2	0.0172	17.5	41.88	3.02	5.60	0.0686	35.0
SDRH1207D-150M	15	14.09	5.03	9.66	0.0247	20.3	56.36	2.51	4.83	0.0990	40.6
SDRH1207D-220M	22	22.93	4.00	7.57	0.0391	25.9	91.72	2.00	3.78	0.157	51.8
SDRH1207D-330M	33	33.92	3.23	6.22	0.0600	31.5	135.7	1.61	3.11	0.241	63.0
SDRH1207D-470M	47	47.05	2.85	5.28	0.0719	37.1	188.2	1.47	2.84	0.288	74.2
SDRH1207D-680M	68	66.46	2.44	4.44	0.105	44.1	265.9	1.22	2.22	0.421	88.2
SDRH1207D-820M	82	79.75	2.09	4.06	0.143	48.3	319.0	1.04	2.03	0.573	96.6
SDRH1207D-101M	100	99.31	1.96	3.64	0.163	53.9	397.2	0.980	1.82	0.653	107.8
SDRH1207D-151M	150	144.9	1.59	3.01	0.247	65.1	579.6	0.796	1.51	0.989	130.2
SDRH1207D-221M	220	221.5	1.29	2.43	0.376	80.5	886.0	0.645	1.22	1.50	161
SDRH1207D-331M	330	323.8	1.04	2.01	0.574	97.3	1294	0.522	1.01	2.30	195
SDRH1207D-471M	470	467.1	0.85	1.68	0.861	117	1868	0.427	0.838	3.44	234
SDRH1207D-681M	680	676.7	0.76	1.39	1.08	141	2707	0.380	0.697	4.32	282
SDRH1207D-821M	820	818.1	0.65	1.27	1.47	155	3272	0.325	0.633	5.88	310
SDRH1207D-102M	1000	1005	0.61	1.14	1.66	172	4020	0.307	0.571	6.64	344

1) Open Circuit Inductance Test Parameters:100kHz,0.25 Vrms,0.0 Adc Parallel:(1,2 –4,3) Series:(1–4) tie (2–3)

2) RMS current for an approximate DT of 40℃ without core loss. It is recommended that the temperature of the part not exceed 125℃.

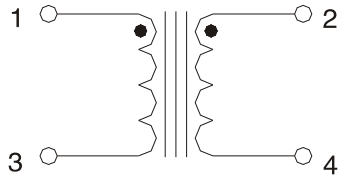
3) Peak current for approximately 30% roll–off at 20℃

4) DCR limits @ 20℃

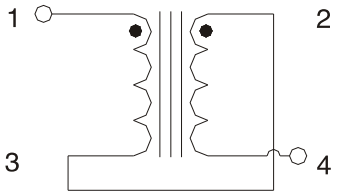
5) Applied Volt–Time product (V– μ S) across the inductor. This value represents the applied V– μ Sat 100KHz necessary to generate a core loss equal to 10% of the total losses for a 40° Ctemperature rise.

SCHEMATIC

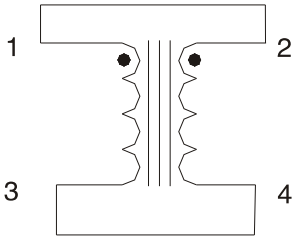
Dual inductor



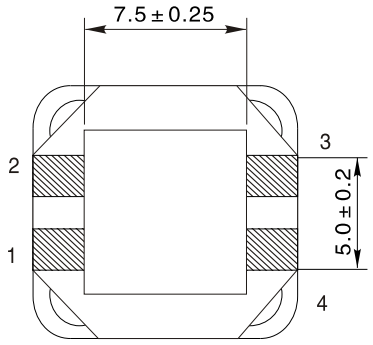
Series Mode

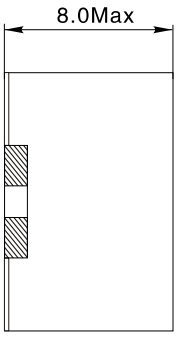


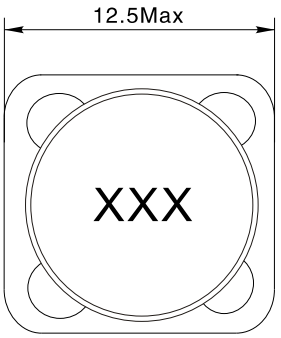
Parallel Mode

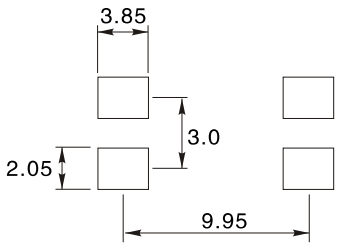


PHYSICAL CHARACTERISTICS(Dimensions:mm)









Recommended Land Pattern

Notes:

1.200Vac Isolation between windings

2.Storage temperature:–40℃ to +125℃

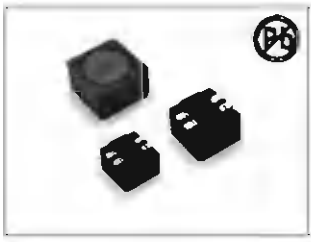
3.Operating temperature:–40℃ to +125℃ (range is application specific).

4.Solderreflow temperature:260℃ max. for 10 seconds max.

5.Turns Ratio (1:3):(2–4)=1:1

6. All specifications subject to change without notice.

COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH1260D SERIES



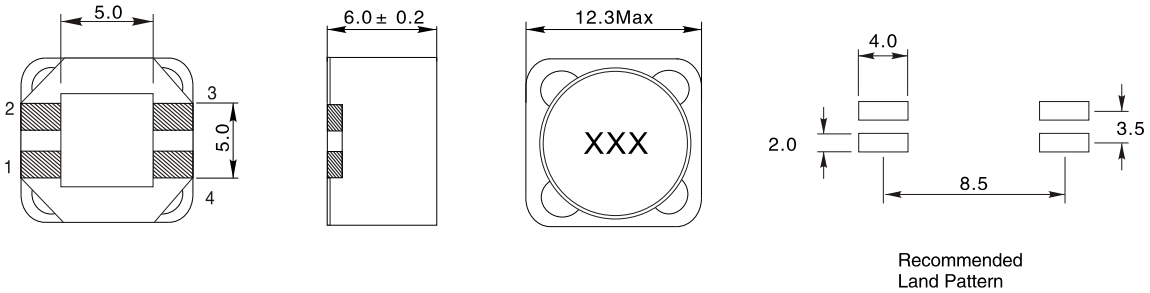
FEATURES:

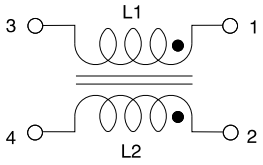
- Only 6.0 mm high and 12.3 mm square
- AEC–Q200 Grade 1 (–40℃ to +125℃)
- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Up to 180 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

ELECTRICAL CHARACTERISTICS:

Partnumber	Common mode impedance Max (KΩ)	Cutoff frequency (MHz)	Inductance (μH)		DCR max (Ω)	Isolation (Vrms)	Irms (A)
			Min	Nom			
SDRH1260D–3R3Y	5.29@53 MHz	170	2.64	3.3	0.020	500	3.60
SDRH1260D–4R7Y	6.27@43 MHz	140	3.76	4.7	0.036	500	3.16
SDRH1260D–5R6Y	8.38@36 MHz	91	4.48	5.6	0.040	500	3.00
SDRH1260D–6R8Y	9.78@33 MHz	120	5.44	6.8	0.048	500	2.75
SDRH1260D–8R2	9.72@30 MHZ	110	6.56	8.2	0.052	500	2.63
SDRH1260D–100Y	12.31@26 MHZ	110	8.00	10	0.060	500	2.45
SDRH1260D–120Y	14.67@23 MHZ	81	9.60	12	0.074	500	2.21
SDRH1260D–150Y	16.17@21 MHZ	77	12.0	15	0.085	500	2.06
SDRH1260D–180Y	16.96@18 MHZ	64	14.4	18	0.097	500	1.93
SDRH1260D–220Y	20.73@17 MHZ	79	17.6	22	0.116	500	1.76
SDRH1260D–270Y	26.07@15 MHZ	58	21.6	27	0.124	500	1.70
SDRH1260D–330	26.15@12 MHZ	58	26.4	33	0.134	500	1.64
SDRH1260D–390Y	30.30@12 MHZ	38	31.2	39	0.142	500	1.58
SDRH1260D–470Y	29.61@11 MHZ	53	37.6	47	0.174	500	1.44
SDRH1260D–560Y	51.88@9.8 MHZ	33	44.8	56	0.196	500	1.35
SDRH1260D–680Y	55.74@8.6 MHZ	25	54.4	68	0.216	500	1.29
SDRH1260D–820Y	70.75@8.2 MHZ	26	65.6	82	0.274	500	1.15
SDRH1260D–101Y	80.40@7.3 MHZ	17	80.0	100	0.322	500	1.06
SDRH1260D–121Y	87.96@6.2 MHZ	27	108	120	0.418	500	0.93
SDRH1260D–151Y	97.64@5.4 MHZ	45	135	150	0.476	500	0.87
SDRH1260D–181Y	124.3@5.2 MHZ	23	162	180	0.536	500	0.82
SDRH1260D–221Y	143.4@4.3 MHZ	25	198	220	0.691	500	0.72
SDRH1260D–271Y	134.8@4.3 MHZ	11	243	270	0.808	500	0.67
SDRH1260D–331Y	132.1@3.6 MHZ	35	297	330	1.09	500	0.57
SDRH1260D–391Y	131.0@3.4 MHZ	14	351	390	1.20	500	0.55
SDRH1260D–471Y	183.5@3.3 MHZ	21	423	470	1.59	500	0.48
SDRH1260D–561Y	175.2@2.7 MHZ	15	504	560	1.81	500	0.45
SDRH1260D–681Y	158.6@2.7 MHZ	11	612	680	2.06	500	0.42
SDRH1260D–821Y	225.9@2.2 MHZ	9.2	738	820	2.65	500	0.37
SDRH1260D–102Y	197.0@2.3 MHZ	15	900	1000	3.06	500	0.34

PHYSICAL CHARACTERISTICS & WINDING:

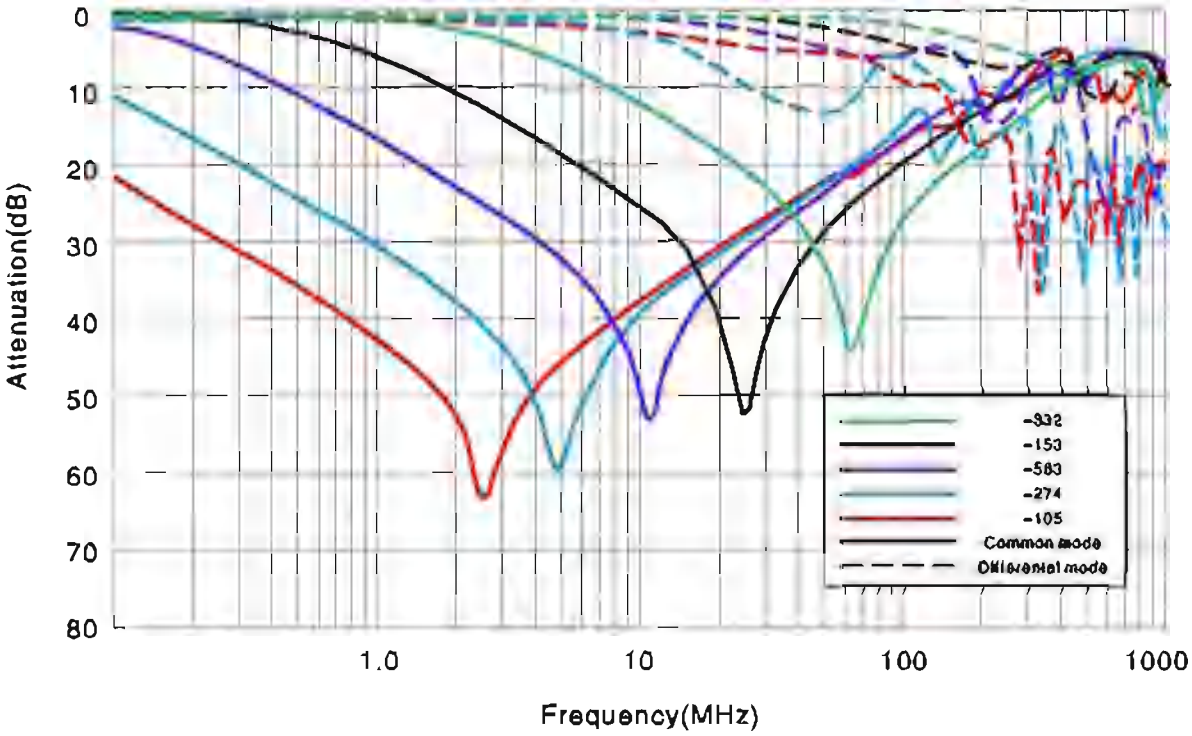




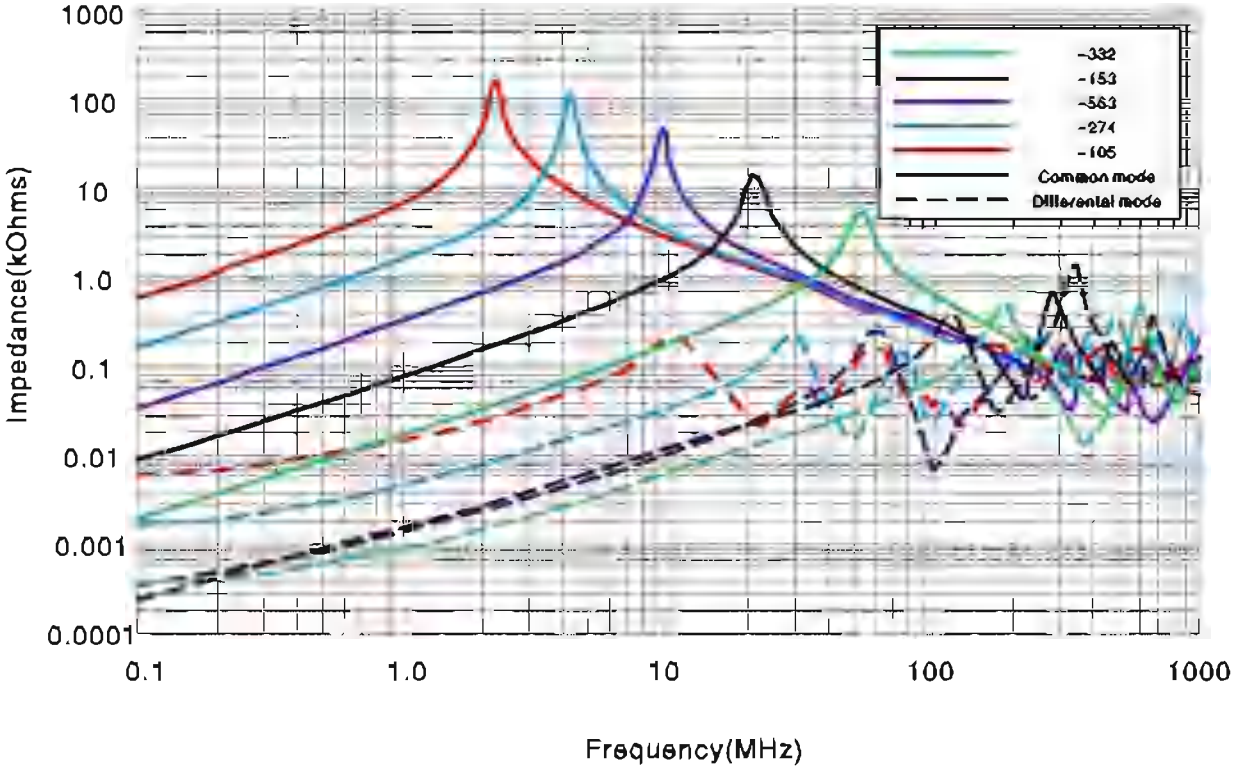
1. Frequency at which the differential mode attenuation equals –3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding–to–winding isolation 500 Vrms, one minute
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +125 ℃ with Irms current. Maximum part temperature +165 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +165 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

PERFORMANCE CURVE:

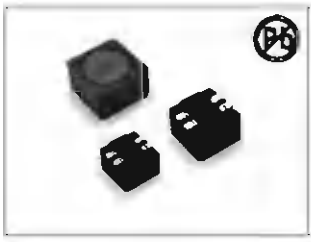
Typical Attenuation(Ref:50 Ohms)



Typical Impedance vs Frequency



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH1278D SERIES



FEATURES:

- Only 7.8 mm high and 12.3 mm square
- Ideal for use in flyback, multi-output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- UL Certified per File E219588

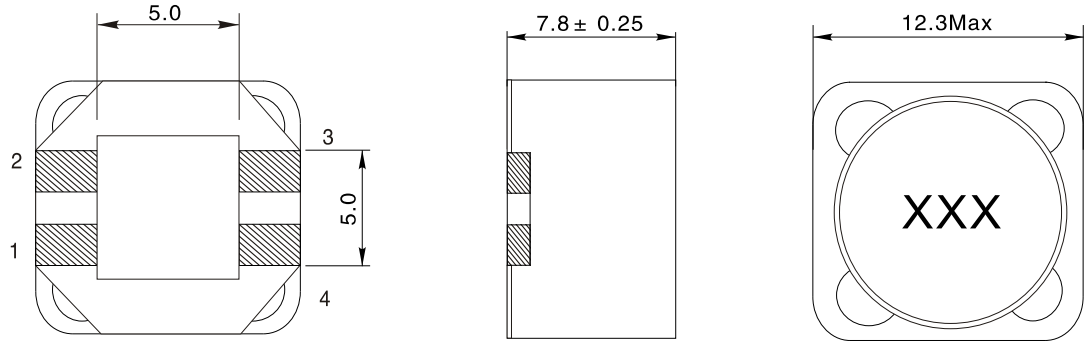
ELECTRICAL CHARACTERISTICS:

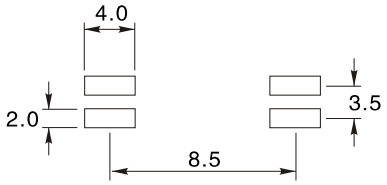
Part number SDRH1278D-	Inductance (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
4R7M	4.7+20%	0.040	33.0	0.98	0.22	13.90	15.20	16.36	3.16	4.47
5R6M	5.6+20%	0.046	30.0	0.98	0.23	13.38	14.86	15.74	2.87	4.06
6R8M	6.8+20%	0.048	23.0	0.98	0.22	12.10	13.56	14.20	2.81	3.98
8R2M	8.2+20%	0.055	20.0	0.98	0.34	10.30	11.52	12.20	2.76	3.90
100M	10+20%	0.058	17.0	0.98	0.34	6.80	10.00	10.66	2.56	3.62
120M	12+20%	0.062	15.0	0.98	0.36	8.20	9.18	9.74	2.48	3.50
150M	15+20%	0.072	13.0	0.99	0.41	7.40	8.36	8.03	2.30	3.25
180M	18+20%	0.080	12.0	0.99	0.37	6.50	7.38	7.86	2.18	3.08
220M	22+20%	0.096	11.0	0.99	0.41	6.00	6.80	7.26	1.99	2.81
270M	27+20%	0.120	10.0	0.99	0.43	5.80	6.56	7.02	1.78	2.52
330M	33+20%	0.150	9.5	0.99	0.56	5.50	6.10	6.52	1.59	2.25
390M	39+20%	0.161	8.5	0.99	0.64	4.70	5.26	5.60	1.54	2.18
470M	47+20%	0.180	7.5	0.99	0.70	3.70	4.34	4.60	1.45	2.05
560M	56+20%	0.190	7.0	0.99	0.76	3.60	4.18	4.50	1.41	2.00
680M	66+20%	0.210	6.5	0.99	0.88	3.50	4.04	4.32	1.35	1.90
820M	82+20%	0.280	5.0	0.99	0.85	2.60	3.72	4.02	1.16	1.65
101M	100+20%	0.300	4.5	>0.99	0.90	2.20	3.24	3.46	1.13	1.59
121K	120+10%	0.410	4.3	0.99	1.31	2.10	2.94	3.16	0.96	1.36
151K	150+10%	0.460	4.1	>0.99	1.46	3.30	2.54	2.70	0.91	1.29
181K	180+10%	0.510	4.0	>0.99	0.93	2.80	2.42	2.58	0.86	1.22
221K	220+10%	0.690	3.4	>0.99	1.54	1.90	2.16	2.28	0.74	1.05
271K	270+10%	0.900	3.1	>0.99	1.17	1.70	1.94	2.10	0.65	0.92
331K	330+10%	1.02	2.9	0.99	4.14	1.50	1.70	1.84	0.61	0.86
391K	390+10%	1.12	2.7	>0.99	1.64	1.40	1.60	1.70	0.58	0.82
471K	470+10%	1.53	2.2	>0.99	0.25	1.30	1.50	1.60	0.50	0.70
561K	560+10%	1.68	2.0	>0.99	2.68	1.20	1.34	1.46	0.47	0.67
681K	680+10%	2.29	1.7	>0.99	2.11	1.00	1.08	1.22	0.41	0.58
821K	820+10%	2.55	1.4	>0.99	2.39	0.900	1.04	1.18	0.39	0.55
102K	1000+10%	2.87	1.3	>0.99	4.28	0.850	0.946	1.05	0.37	0.52

1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +125 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +165 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +165 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7 ″ reel; 3500/13 ″ reel

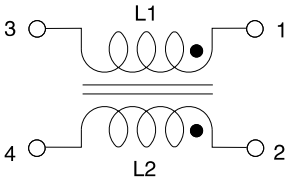
PHYSICAL CHARACTERISTICS & WINDING:

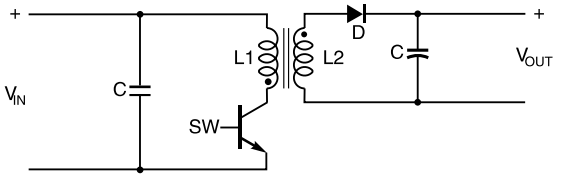
Dimensions are in mm



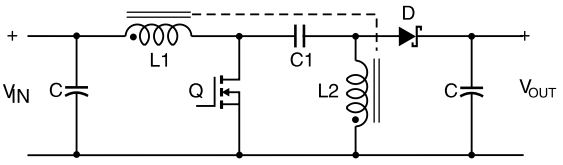


Recommended
Land Pattern

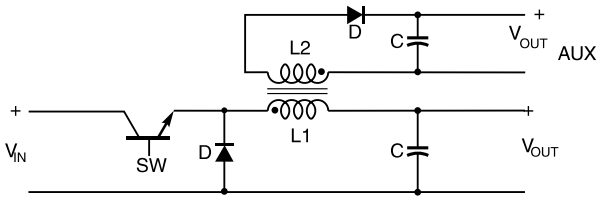




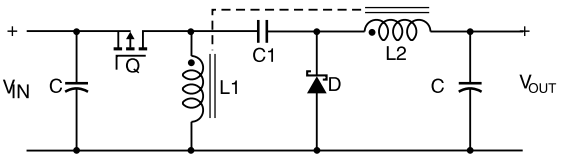
Typical Flyback Converter



Typical SEPIC schematic



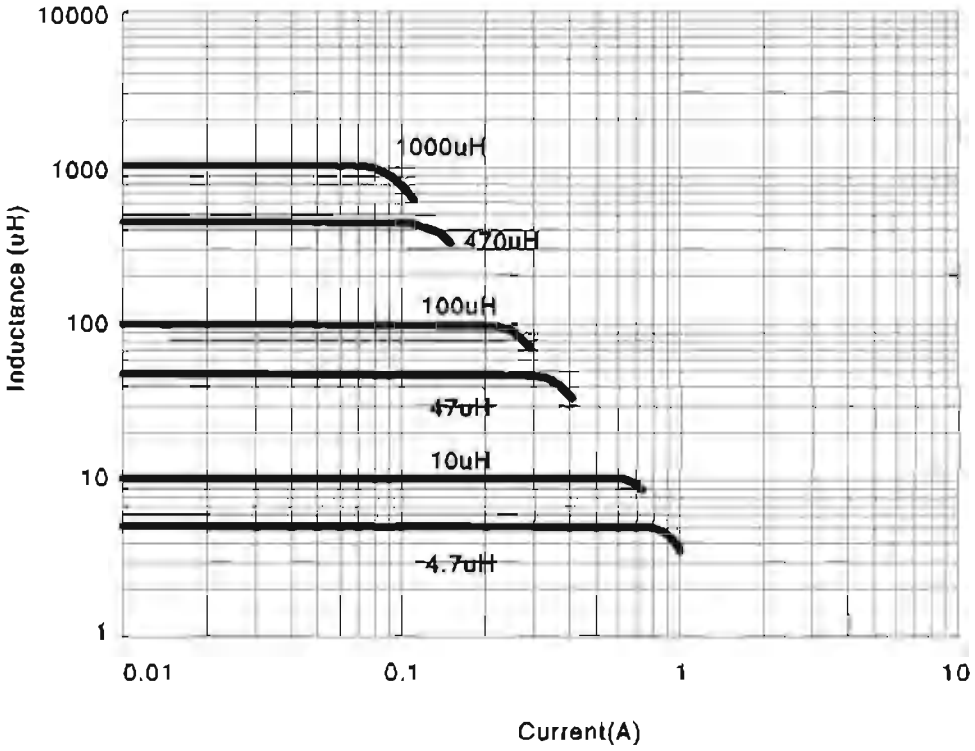
Typical Buck Converter with auxiliary output



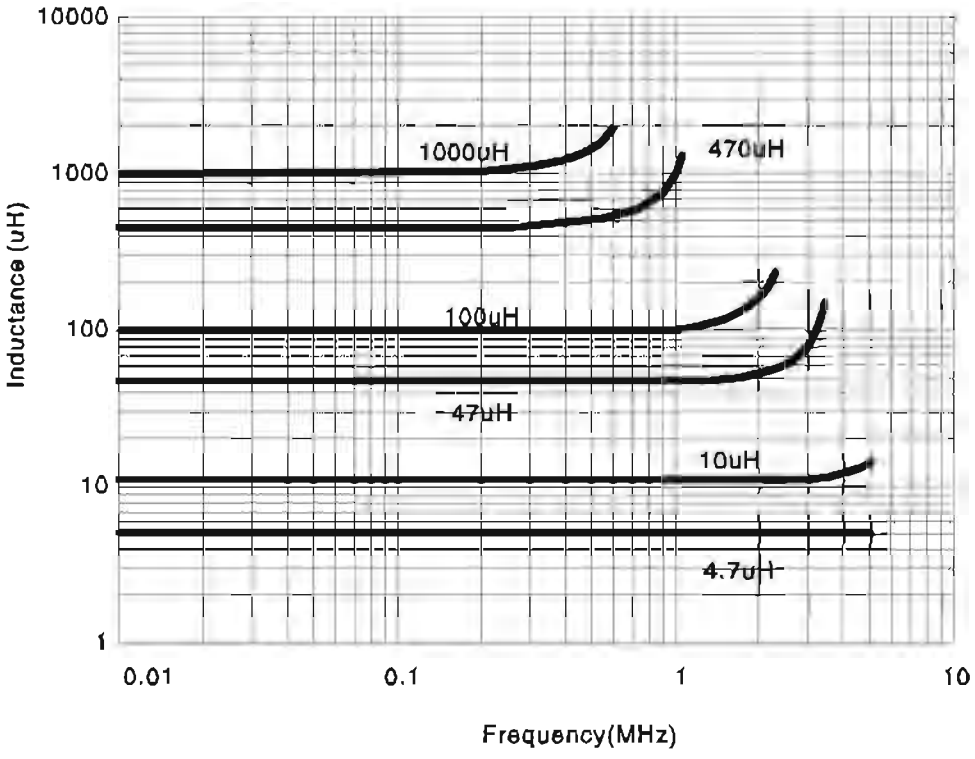
Typical Zeta schematic

PERFORMANCE CURVE:

TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH1514D SERIES

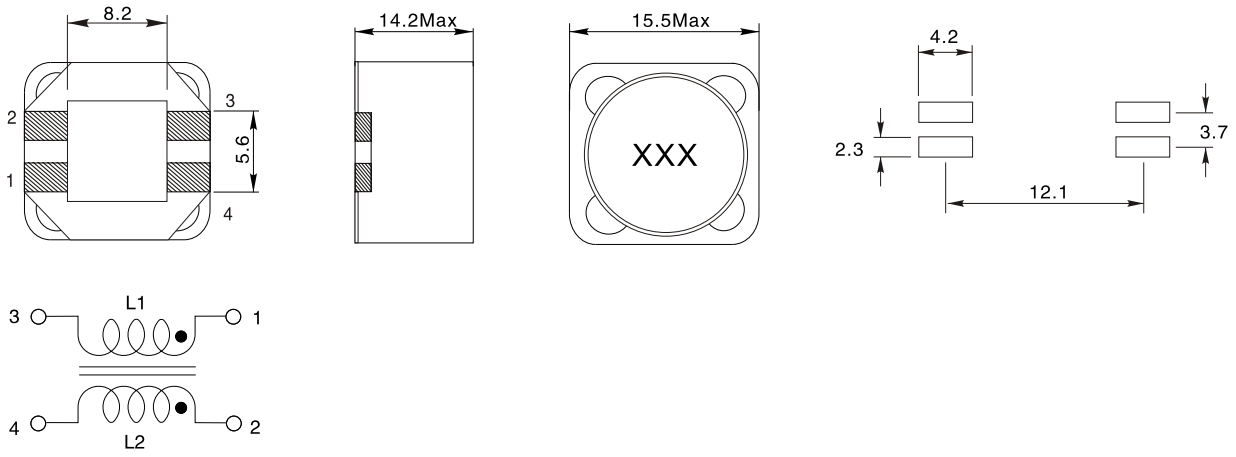
FEATURES:

- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Up to 100 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

ELECTRICAL CHARACTERISTICS:

Partnumber	Common mode impedance Max (KΩ)	Cutoff frequency (MHz)	Inductance (μH)		DCR max (Ω)	Isolation (Vrms)	Irms (A)
			Min	Nom			
SDRH1514D–2R5M	2.96 @ 35 MHz	100	2.00	2.5	0.012	500	6.0
SDRH1514D–4R7M	4.02 @ 23 MHz	18.0	3.76	4.7	0.014	500	5.4
SDRH1514D–100M	6.54 @ 14 MHz	17.0	8.00	10	0.018	500	4.8
SDRH1514D–120M	7.83 @ 14 MHz	26.0	9.60	12	0.022	500	4.7
SDRH1514D–150M	11.7 @ 11 MHz	9.3	12.00	15	0.028	500	4.1
SDRH1514D–220M	17.1 @ 8.10 MHz	14.0	17.60	22	0.036	500	3.6
SDRH1514D–270M	17.9 @ 7.20 MHz	10.0	21.60	27	0.039	500	3.5
SDRH1514D–330M	22.6 @ 7.10 MHz	21.0	26.40	33	0.052	500	3.0
SDRH1514D–470M	47.6 @ 6.40 MHz	5.3	37.60	47	0.075	500	2.6
SDRH1514D–680M	37.8 @ 4.30 MHz	8.8	54.40	68	0.090	500	2.2
SDRH1514D–101K	59.8 @ 3.70 MHz	11.0	90.00	100	0.126	500	2.0
SDRH1514D–221K	85.6 @ 2.50 MHz	10.0	198	220	0.287	500	1.3
SDRH1514D–331K	58 @ 2.00 MHz	7.3	297	330	0.367	500	1.2
SDRH1514D–471K	101.9 @ 1.60 MHz	5.3	423	470	0.550	500	0.92
SDRH1514D–102K	157.9 @ 1.10 MHz	4.9	900	1000	1.25	500	0.66

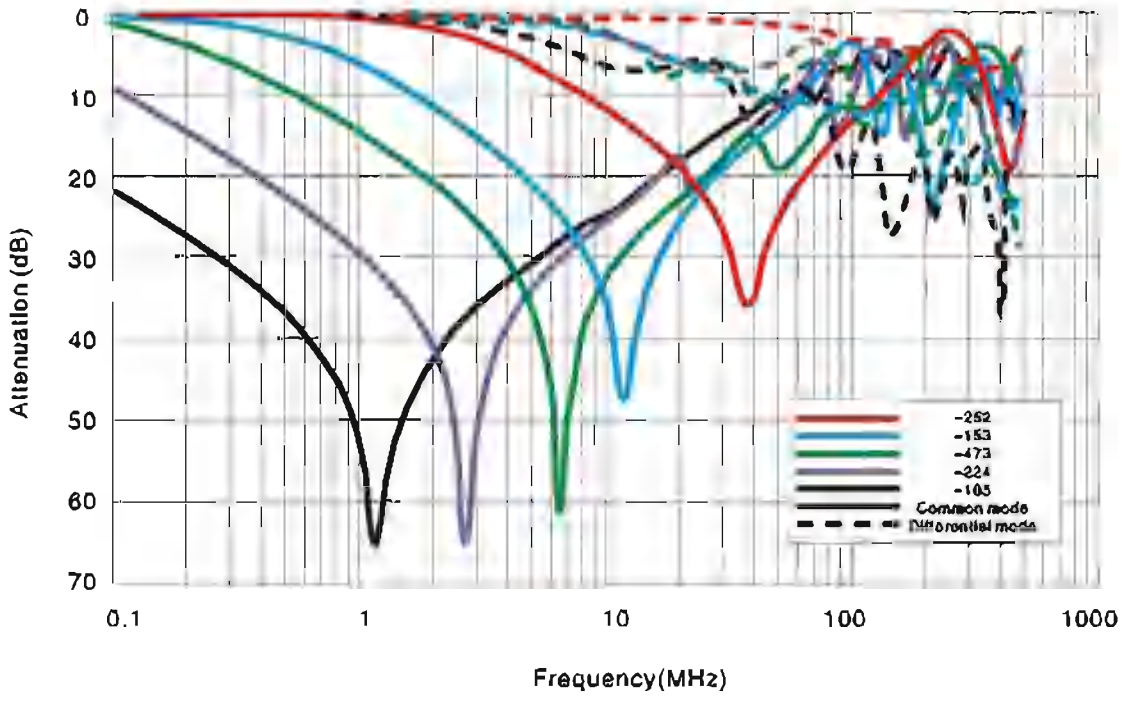
PHYSICAL CHARACTERISTICS & WINDING:



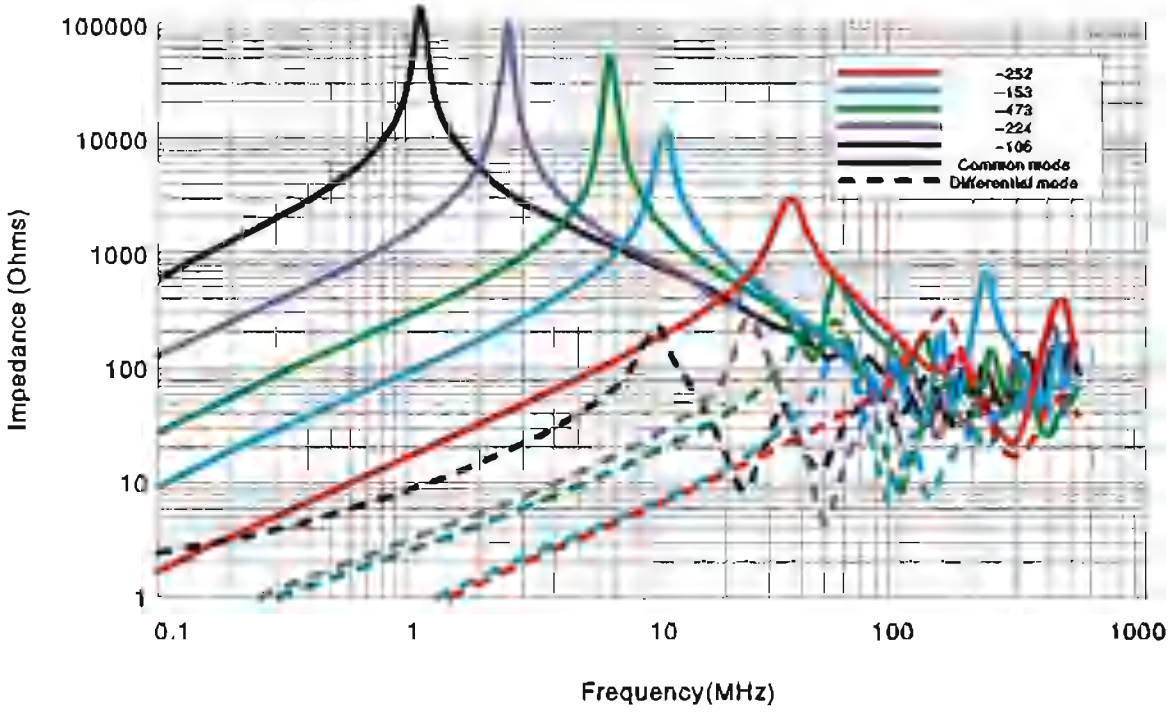
1. Frequency at which the differential mode attenuation equals 3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding–to–winding isolation 500 Vrms, one minute
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +85 ℃ with Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

PERFORMANCE CURVE:

TYPICAL ATTENUATION (REF: 50 OHMS)



TYPICAL IMPEDANCE VS FREQUENCY



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH1583D SERIES

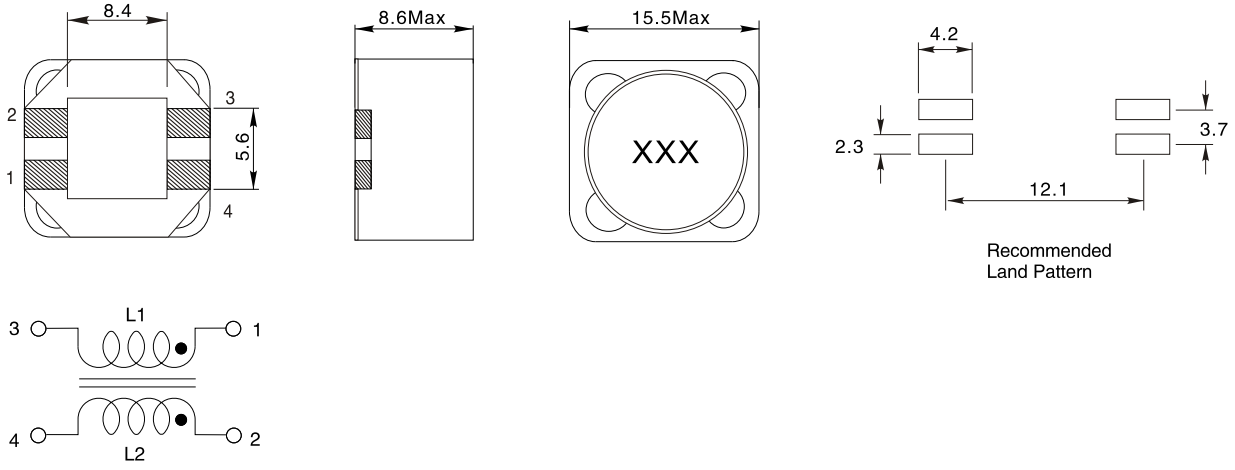
FEATURES:

- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Up to 38 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

ELECTRICAL CHARACTERISTICS:

Partnumber	Common mode impedance Max (KΩ)	Cutoff frequency (MHz)	Inductance (μH)		DCR max (Ω)	Isolation (Vrms)	Irms (A)
			Min	Nom			
SDRH1583D–100M	10.86 @ 17 MHz	38	8.0	10	0.031	500	3.68
SDRH1583D–120M	12.11 @ 16 MHz	30	9.6	12	0.037	500	3.54
SDRH1583D–150M	12.31 @ 14 MHz	25	12.0	15	0.045	500	3.18
SDRH1583D–180M	15.77 @ 13 MHz	25	14.4	18	0.048	500	3.04
SDRH1583D–220M	14.47 @ 12 MHz	28	17.6	22	0.065	500	2.44
SDRH1583D–330M	33.82 @ 9 MHz	28	26.4	33	0.095	500	2.16
SDRH1583D–470M	39.79 @ 7.6 Mhz	23	37.6	47	0.115	500	1.98
SDRH1583D–680M	49.24 @ 5.9 MHz	17	54.4	68	0.165	500	1.56
SDRH1583D–101K	69.83 @ 5 MHz	16	90.0	100	0.260	500	1.24
SDRH1583D–151K	73.09 @ 3.9 MHz	12	135	150	0.380	500	1.06
SDRH1583D–221K	78.91 @ 3.3 MHz	9.7	198	220	0.460	500	0.92
SDRH1583D–471K	104.9 @ 2.2 MHz	7.4	423	470	1.04	500	0.65
SDRH1583D–102K	129.0 @ 1.5 MHz	5.8	900	1000	2.40	500	0.42

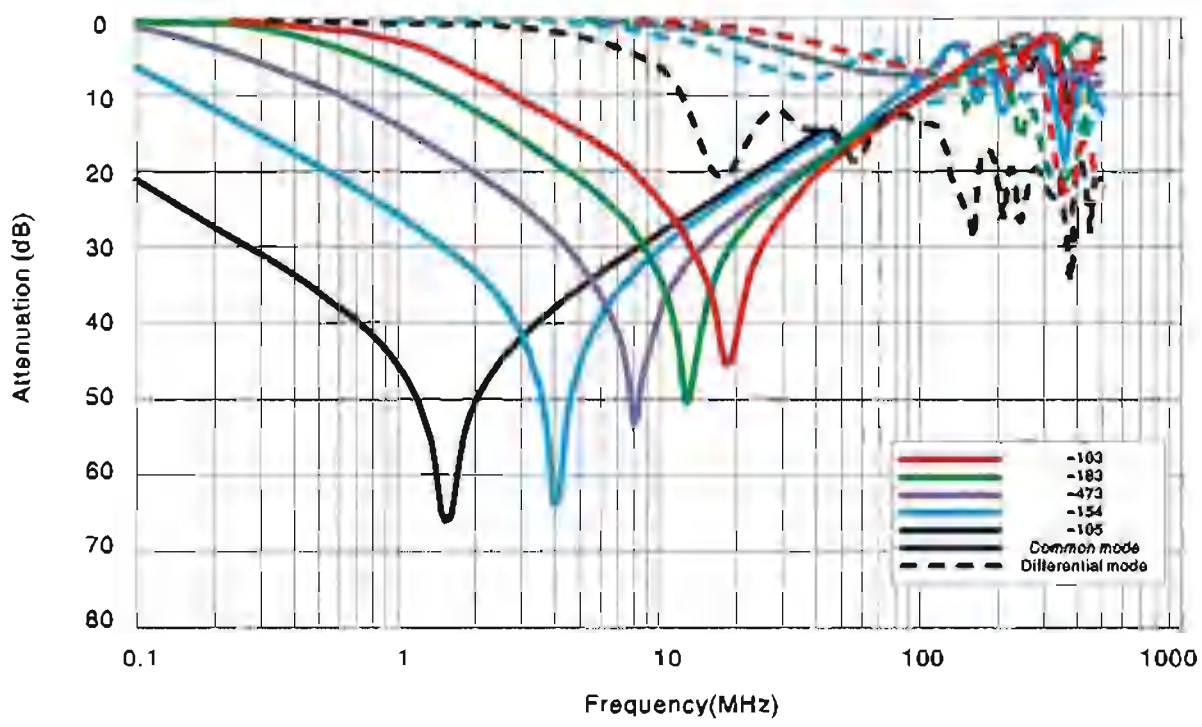
PHYSICAL CHARACTERISTICS & WINDING:



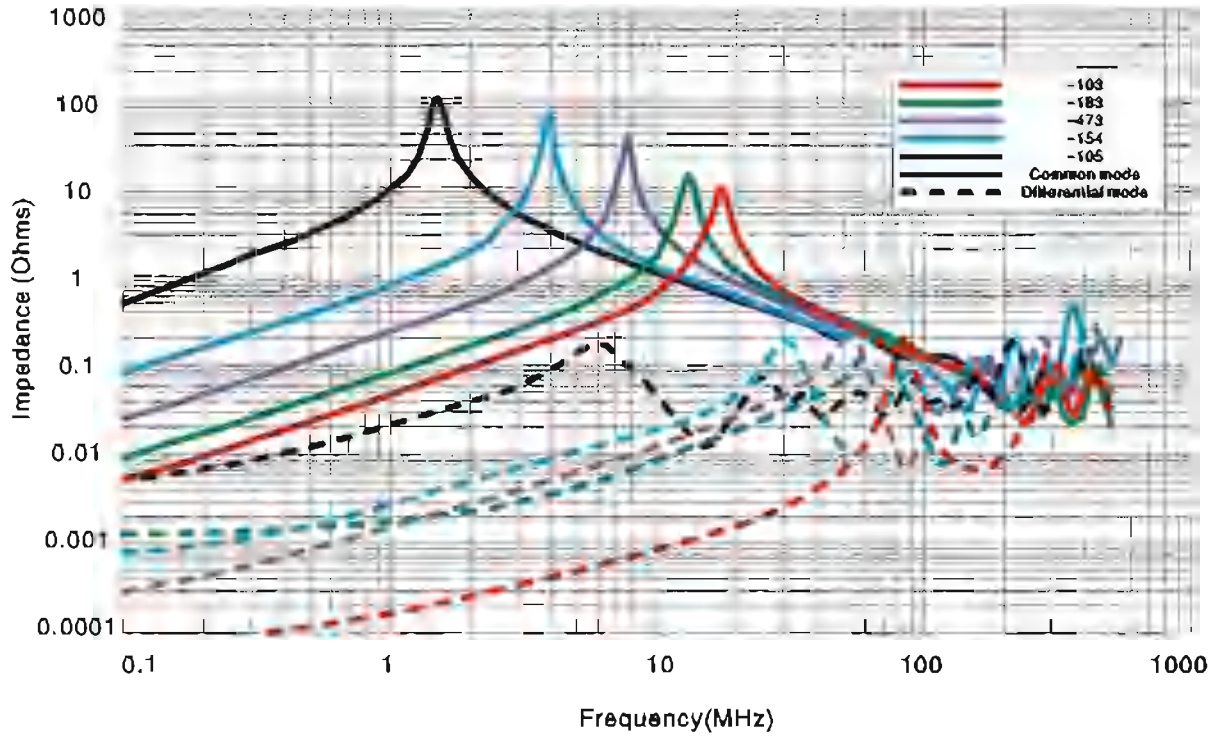
1. Frequency at which the differential mode attenuation equals 3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding–to–winding isolation 500 Vrms, one minute
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +85 ℃ with Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

PERFORMANCE CURVE:

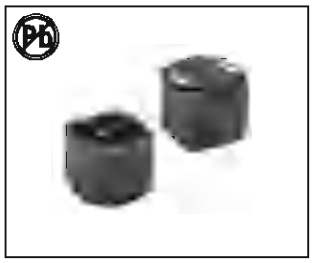
TYPICAL ATTENUATION (REF: 50 OHMS)



TYPICAL IMPEDANCE VS FREQUENCY



COMMON MODE CHOKE, COUPLED INDUCTOR
SDRH1614D SERIES



FEATURES:

- Low DCR, high rated current.
- Magnetic shielded structure
- Lead free product, RoHS compliant.
- Carrier tape packing, suitable for SMT process.

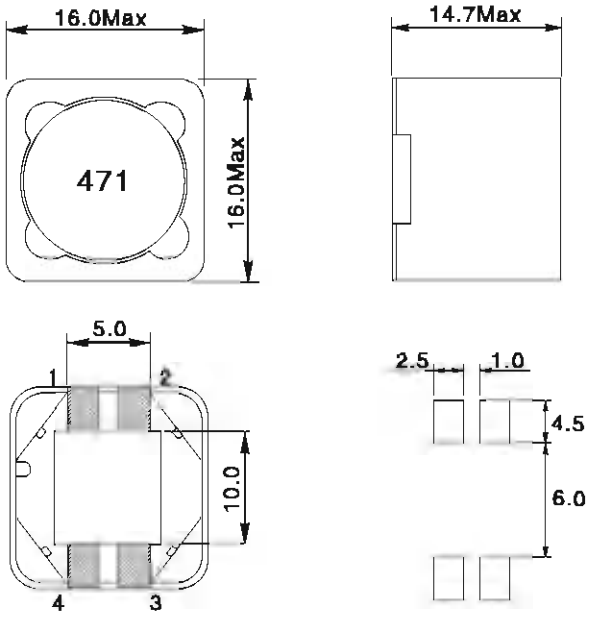
APPLICATIONS:

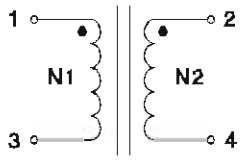
- Widely used in buck converter, laptop, displayer, network communication equipment, and etc.

ELECTRICAL CHARACTERISTICS@25℃

Part Number	Inductance (uH)	DCR (mΩ)Max	Leakage inductance (uH)Typ.	Saturation current(A)			Temperature rise current(A)	
				10%drop	20%drop	30%drop	Both windings	One winding
SDRH1614D-220M	22.0±20%	36.0	0.45	9.1	9.6	10.2	3.8	5.4
SDRH1614D-270M	27.0±20%	39.0	0.45	9.0	9.6	10.2	3.3	4.7
SDRH1614D-330M	33.0±20%	42.0	0.45	7.4	8.2	9.0	3.2	4.5
SDRH1614D-470M	47.0±20%	54.0	0.55	5.8	6.6	6.75	3.05	4.31
SDRH1614D-680M	68.0±20%	65.0	0.55	5.3	5.7	5.9	2.72	3.84
SDRH1614D-101M	100±10%	93.0	0.55	4.35	4.75	4.95	2.08	2.94
SDRH1614D-221M	220±10%	172.0	0.7	2.95	3.2	3.3	1.61	2.27
SDRH1614D-331M	330±10%	258.0	0.8	2.55	2.65	2.78	1.32	1.86
SDRH1614D-471M	470±10%	382.0	1.2	2.0	2.2	2.3	1.03	1.46
SDRH1614D-102M	1000±10%	766.0	2.0	1.45	1.55	1.6	0.78	1.1

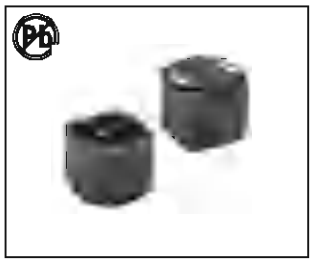
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



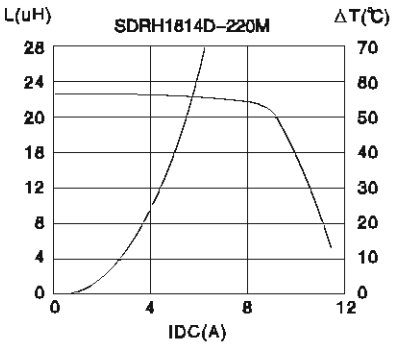


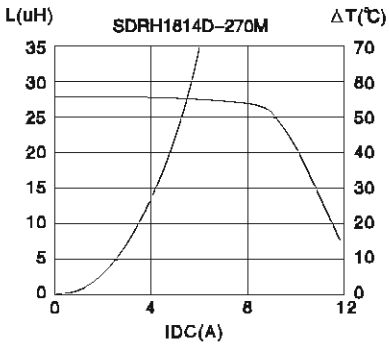
- All data is tested based on 25℃ ambient temperature
- Inductance measure condition at 100kHz, 0.1V
- Leakage inductance is for N1 and is measured with N2 shorted
- Saturation current: the actual value of DC current when the inductance decrease correspanding percentage of its initial value
- Temperature rise current: the actual value of DC current when the temperature rise is ΔT40℃(Ta=25℃)
- Operating temperature: −40℃ to +125℃(including self temperature rise)
- Special remind: Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

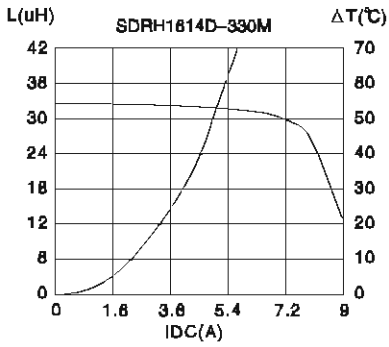
COMMON MODE CHOKE, COUPLED INDUCTOR
SDRH1614D SERIES

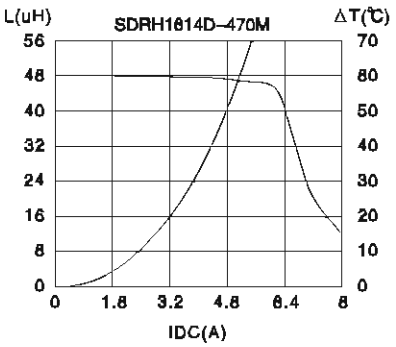


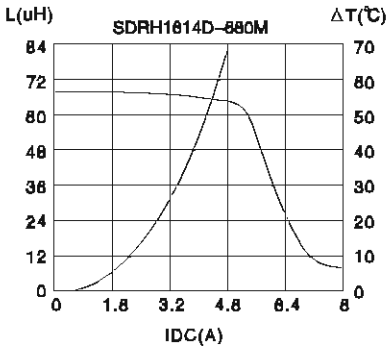
SATURATION CURRENT VS TEMPERATURE RISE CURRENT CURVE

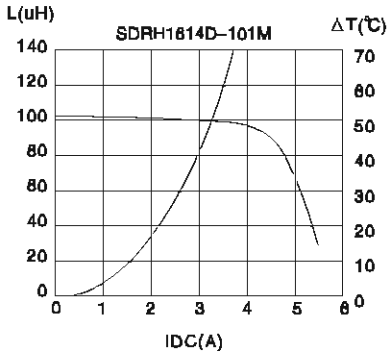


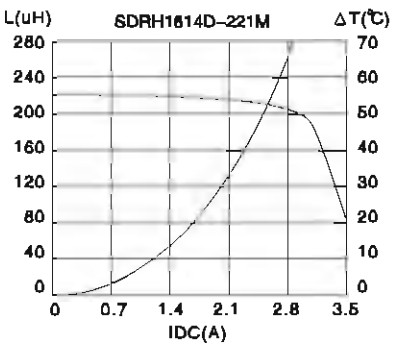


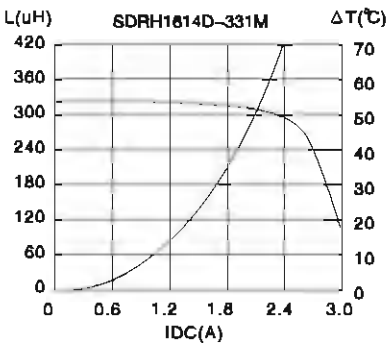


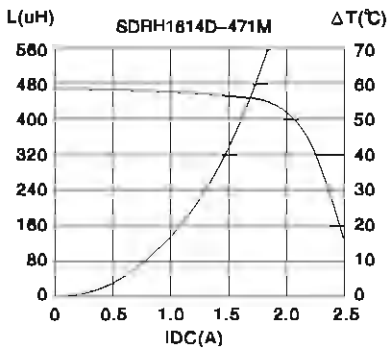


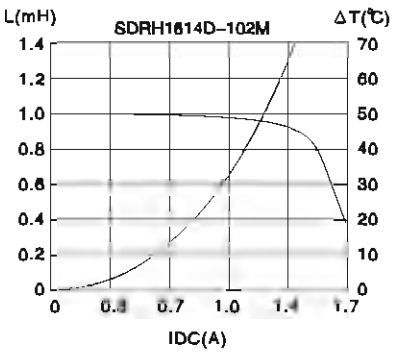




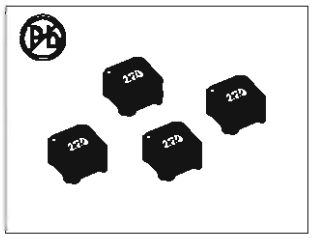








COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH3015D SERIES



FEATURES:

- Only 1.4 mm high and 3 mm square
- Ideal for use in flyback, multi-output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- UL Certified per File E219589

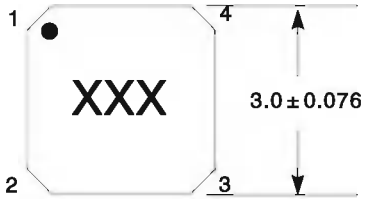
ELECTRICAL CHARACTERISTICS:

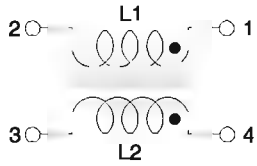
Part number SDRH3015D-	Inductance ±20% (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
R39M	0.39	0.071	289	0.89	0.08	3.2	3.3	3.4	1.45	2.05
R56M	0.56	0.079	235	0.93	0.08	2.7	2.8	2.8	1.37	1.94
1R0M	1.0	0.129	180	0.95	0.09	2.0	2.1	2.2	1.08	1.52
1R5M	1.5	0.204	140	0.98	0.11	1.6	1.7	1.8	0.86	1.20
1R8M	1.8	0.273	135	0.98	0.13	1.5	1.6	1.6	0.78	1.10
2R2M	2.2	0.300	110	0.97	0.14	1.5	1.6	1.6	0.75	1.05
3R3M	3.3	0.337	90	0.98	0.16	1.0	1.1	1.2	0.67	0.94
4R7M	4.7	0.503	79	0.98	0.18	0.86	0.87	0.88	0.54	0.76
6R8M	6.8	0.622	58	0.98	0.22	0.77	0.78	0.79	0.49	0.69
100M	10	1.040	48	0.98	0.28	0.58	0.59	0.60	0.38	0.53
150M	15	1.420	35	0.99	0.37	0.49	0.50	0.51	0.32	0.46
180M	18	1.550	33	0.99	0.42	0.46	0.47	0.48	0.31	0.44
220M	22	1.89	30	0.99	0.48	0.42	0.43	0.44	0.28	0.40
330M	33	2.84	23	0.99	0.63	0.34	0.35	0.36	0.23	0.32
470M	47	4.03	17	0.99	0.81	0.28	0.29	0.30	0.19	0.27
680M	68	6.11	14	0.99	1.13	0.24	0.25	0.26	0.16	0.22
101M	100	8.54	11	0.99	1.50	0.20	0.21	0.22	0.13	0.19
121M	120	9.23	9.0	0.99	1.76	0.19	0.20	0.20	0.13	0.18
151M	150	12.40	8.0	0.99	2.22	0.16	0.17	0.18	0.11	0.16
181M	180	15.32	7.5	0.99	2.79	0.15	0.16	0.17	0.10	0.14
221M	220	18.68	6.0	0.99	3.56	0.13	0.14	0.15	0.09	0.13
331M	330	27.70	5.0	0.99	5.18	0.11	0.12	0.12	0.07	0.10

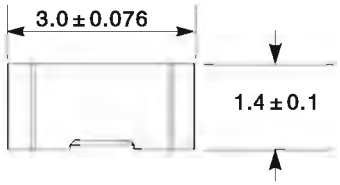
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +85 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +125 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +125 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7 " reel; 3500/13 " reel

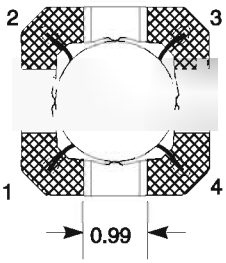
PHYSICAL CHARACTERISTICS & WINDING:

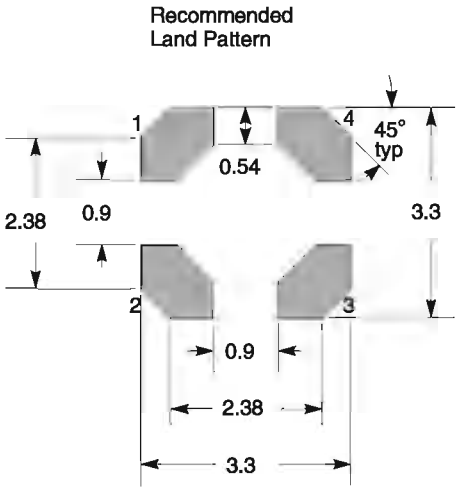
Dimensions are in mm

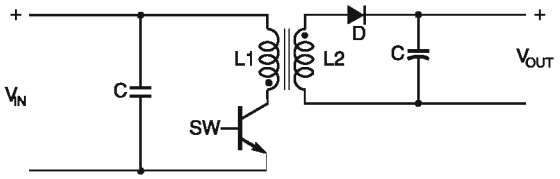




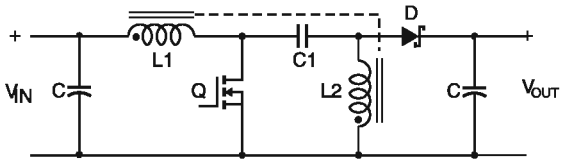




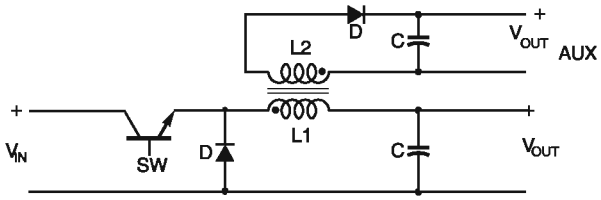




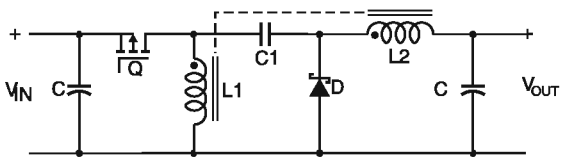
Typical Flyback Converter



Typical SEPIC schematic



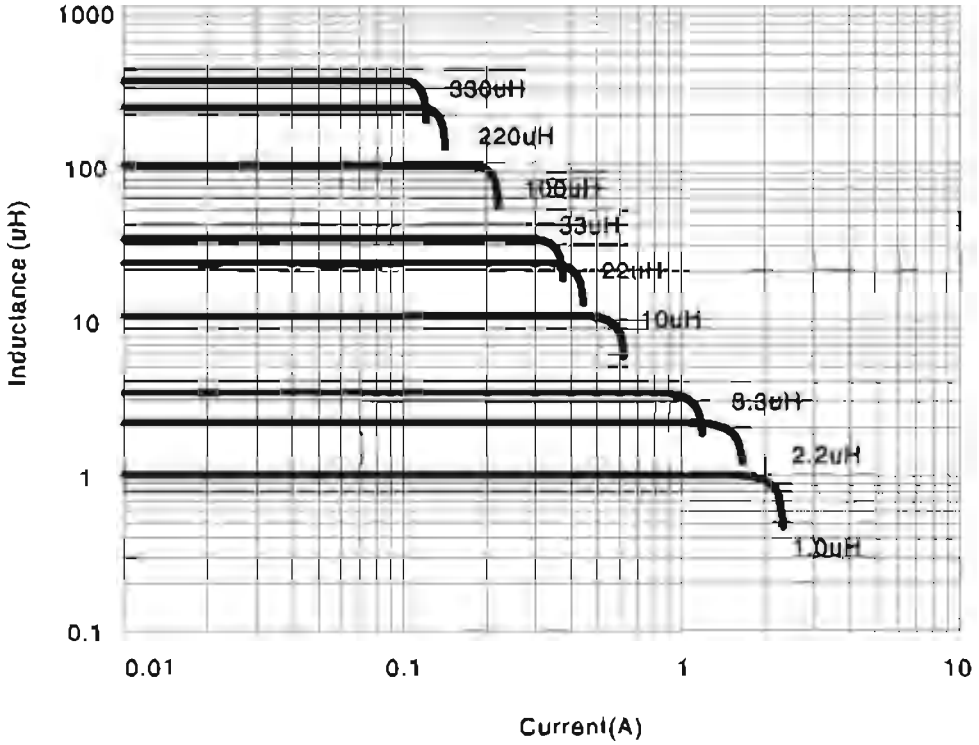
Typical Buck Converter with auxiliary output



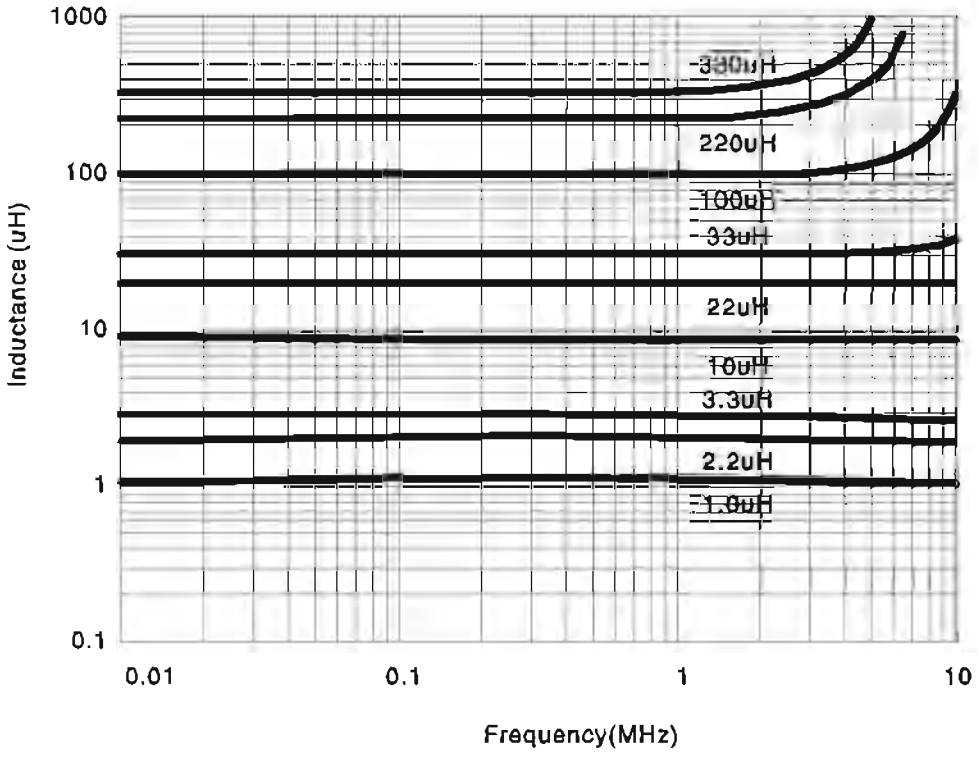
Typical Zeta schematic

PERFORMANCE CURVE:

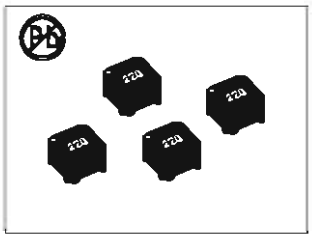
TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH4012D SERIES



FEATURES:

- Only 1.1 mm high and 4 mm square
- Ideal for use in flyback, multi-output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- AEC-Q200 Grade 1 (40℃ to +125℃)

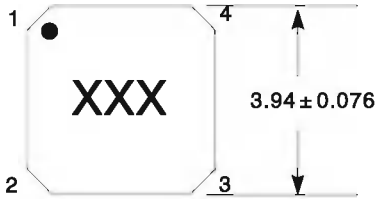
ELECTRICAL CHARACTERISTICS:

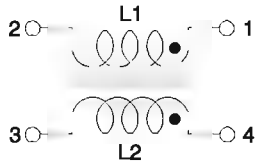
Part number SDRH4012D-	Inductance (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
R33N	0.33 +30%	0.042	255	0.94	0.06	5.2	5.4	5.6	1.87	2.65
R56N	0.56 +30%	0.087	185	0.95	0.08	3.7	3.8	3.9	1.30	1.84
R82N	0.82 +30%	0.100	130	0.97	0.09	3.2	3.3	3.4	1.21	1.72
1R5N	1.5 +30%	0.185	88	0.97	0.11	2.50	2.81	2.91	1.15	1.62
2R2N	2.2 +30%	0.235	70	0.98	0.14	2.30	2.40	2.50	0.95	1.35
3R3N	3.3 +30%	0.320	48	0.98	0.16	1.80	1.90	2.00	0.75	1.06
4R7M	4.7 +20%	0.500	39	0.98	0.18	1.70	1.80	1.90	0.65	0.92
5R6M	5.6 +20%	0.620	32	0.99	0.20	1.60	1.70	1.80	0.55	0.78
6R8M	6.8 +20%	0.530	31	0.99	0.22	1.20	1.52	1.63	0.60	0.86
8R2M	8.2 +20%	0.600	29	0.99	0.24	1.10	1.20	1.30	0.55	0.78
100M	10 +20%	0.750	25	0.99	0.26	0.98	1.00	1.10	0.50	0.71
150M	15 +20%	1.13	21	0.99	0.30	0.90	0.92	0.94	0.43	0.60
220M	22 +20%	1.63	15	0.99	0.34	0.70	0.82	0.84	0.34	0.48
330M	33 +20%	1.83	12	>0.99	0.41	0.37	0.57	0.58	0.31	0.44
470M	47 +20%	2.52	8.8	>0.99	0.51	0.33	0.39	0.40	0.28	0.39
680M	68 +20%	3.23	7.6	>0.99	0.66	0.27	0.36	0.37	0.25	0.36
820M	82 +20%	3.86	7.3	>0.99	0.75	0.27	0.27	0.29	0.23	0.31
101M	100 +20%	4.76	6.1	>0.99	0.86	0.22	0.28	0.29	0.20	0.27
121M	120 +20%	5.54	5.3	>0.99	0.98	0.21	0.26	0.27	0.19	0.27
151M	150 +20%	6.90	4.6	>0.99	1.18	0.18	0.26	0.27	0.17	0.23
181M	180 +20%	8.75	4.1	>0.99	1.40	0.18	0.21	0.23	0.14	0.18
221M	220 +20%	11.24	3.3	>0.99	1.66	0.15	0.16	0.17	0.12	0.17
331M	330 +20%	17.00	2.8	>0.99	2.45	0.13	0.16	0.16	0.10	0.14

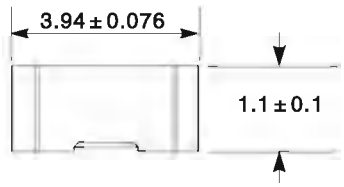
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +125 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +165 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +165 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7 " reel; 3500/13 " reel

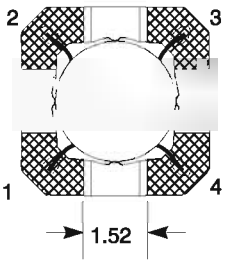
PHYSICAL CHARACTERISTICS & WINDING:

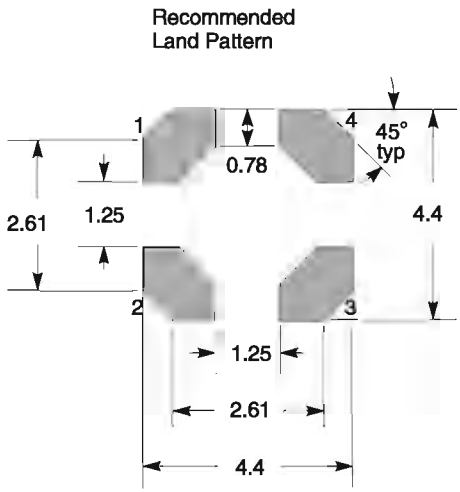
Dimensions are in mm

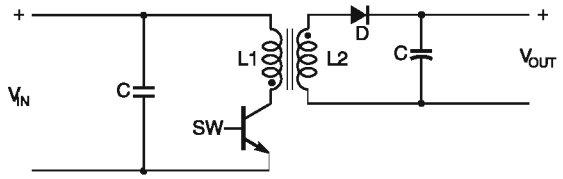




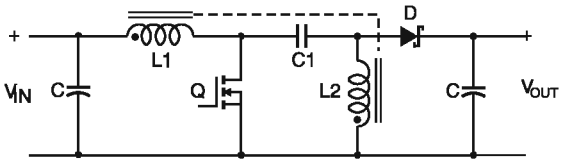




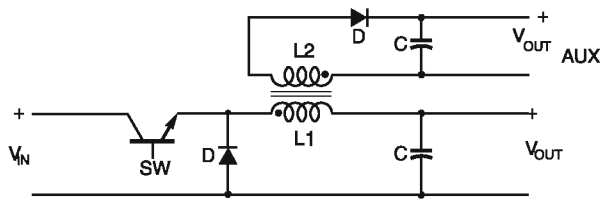




Typical Flyback Converter



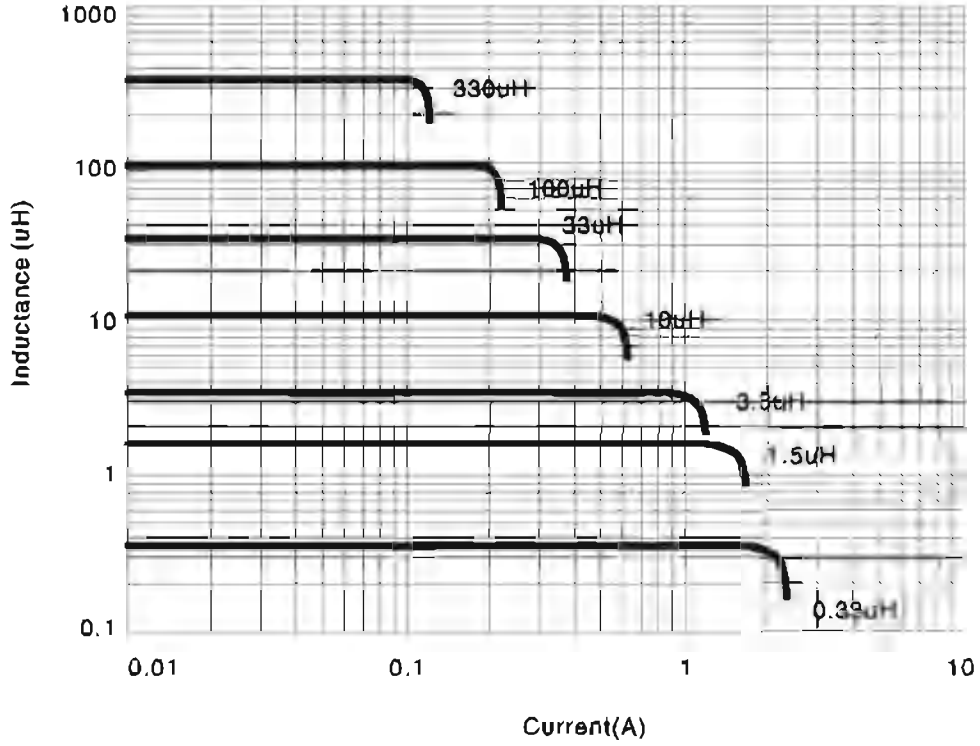
Typical SEPIC schematic



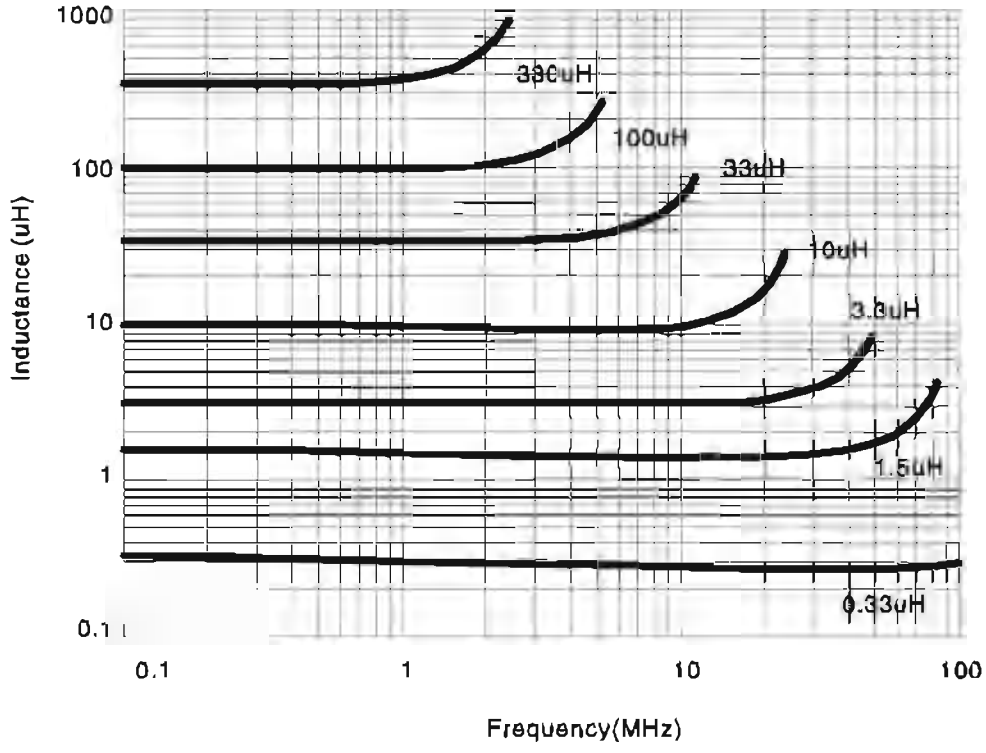
Typical Buck Converter with auxiliary output

PERFORMANCE CURVE:

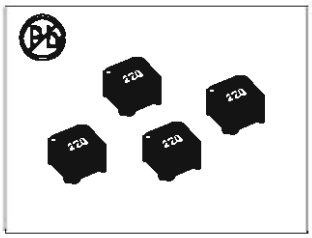
TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



COMMON MODE CHOKES
SDRH4829D SERIES



FEATURES:

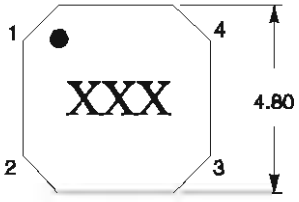
- Only 2.9 mm high and 4.8 mm square
- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Winding to winding isolation (hipot) up to 2500 VDC
- 1500 Vdc (1000 Vrms), one minute isolation (hi–pot) between windings
- Can be used as coupled inductors for SEPIC applications
- UL Certified per File E219588

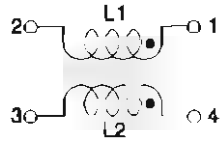
ELECTRICAL CHARACTERISTICS:

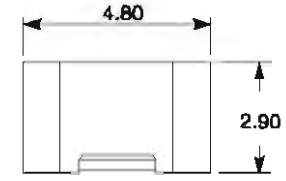
Partnumber	Common mode impedance max (kΩ)	Cutoff frequency (MHZ)	Inductance (μH)		DCR max (Ohms)	Isolation (Vrms)	Irms (A)
			min	nom			
SDRH4829D–4R7Y	7.85@66 MHz	410	3.76	4.7	0.322	1000	1.90
SDRH4829D–6R8Y	9.20@56 MHz	470	5.44	6.8	0.395	1000	1.55
SDRH4829D–100Y	11.69@40 MHz	340	8.00	10	0.480	1000	1.30
SDRH4829D–330Y	25.81@19 MHz	240	26.4	33	0.895	1000	0.67
SDRH4829D–151Y	102.7@9.6 MHz	130	120	150	3.82	1000	0.31
SDRH4829D–221Y	174.7@7.5 MHz	83	176	220	5.25	1000	0.24

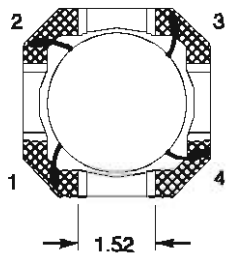
1. Frequency at which the differential mode attenuation equals –3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilant/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. 1000 Vrms, one minute isolation (hipot) between windings.
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +85 ℃ with (40 ℃ rise) Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

PHYSICAL CHARACTERISTICS & WINDING:

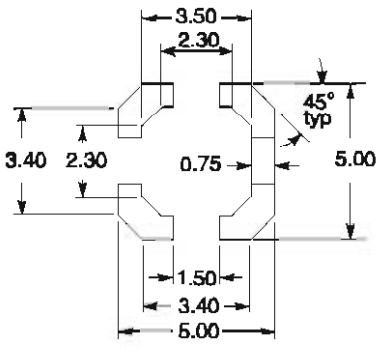








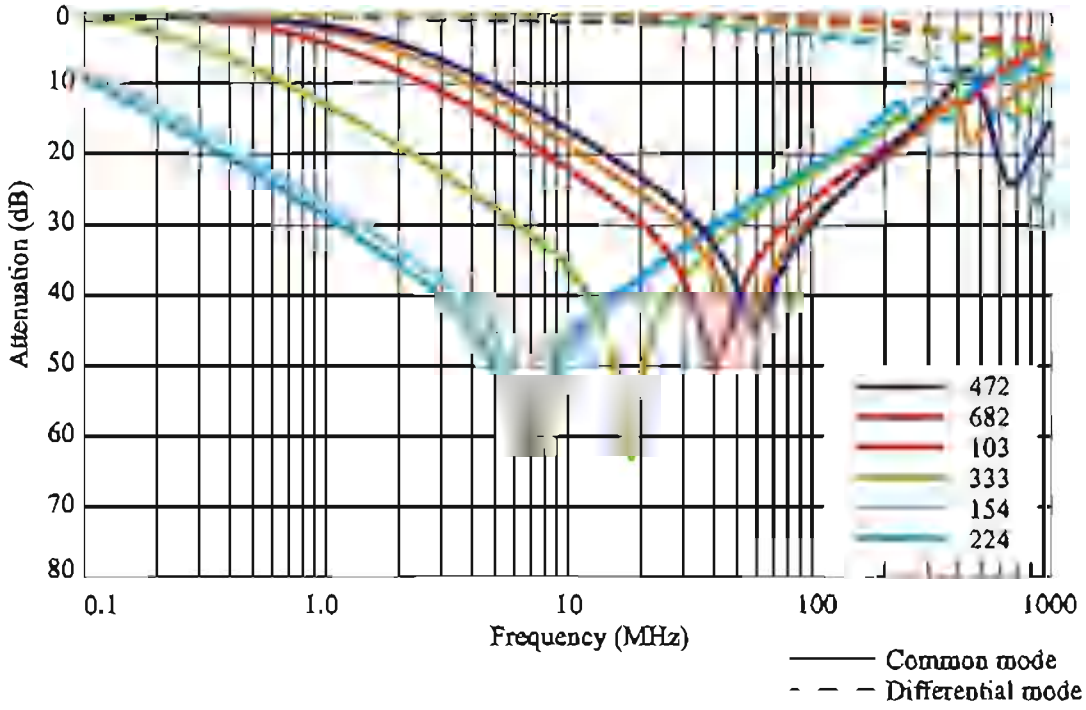
Recommended
Land Pattern



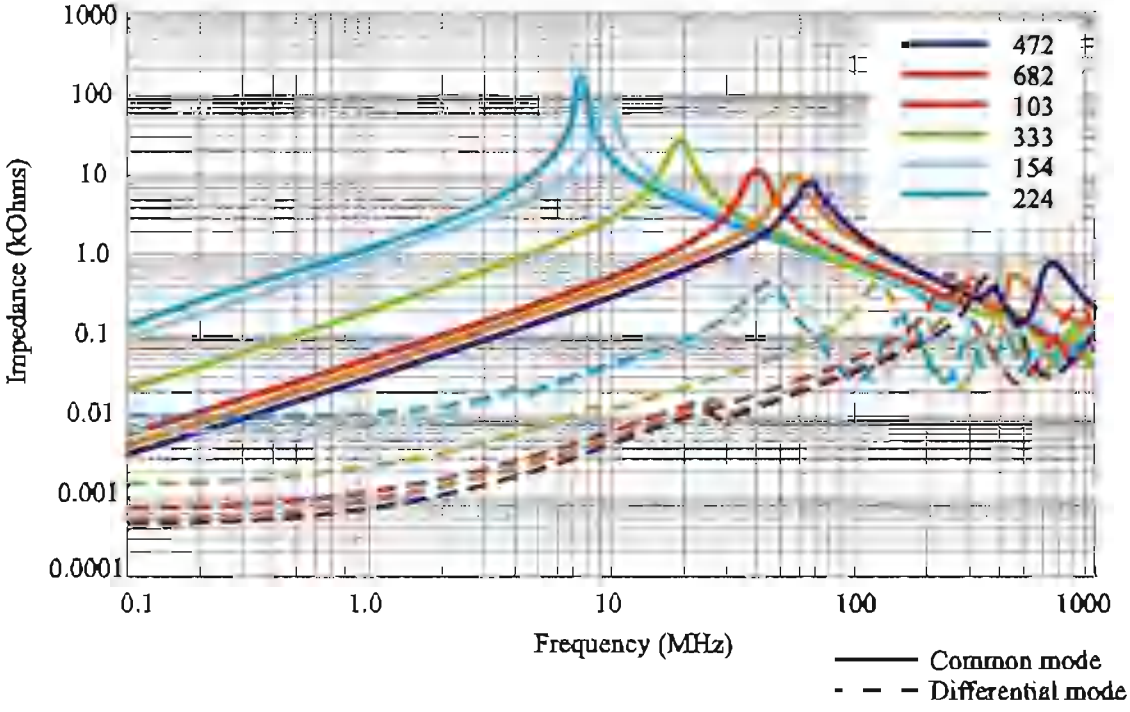
Dimensions are in mm

PERFORMANCE CURVE:

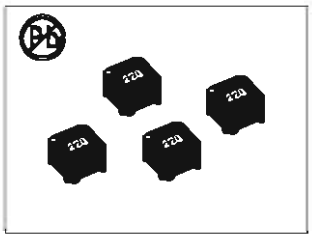
Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH5010D SERIES



FEATURES:

- Only 1.0 mm high and 5 mm square
- Ideal for use in flyback, multi-output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- UL Certified per File E219588

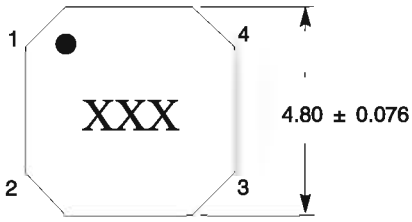
ELECTRICAL CHARACTERISTICS:

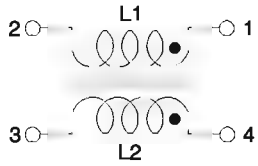
Part number SDRH5010D-	Inductance (uH) ±20%	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
R68N	0.68 ±30%	0.07	191	0.95	0.07	2.6	2.7	2.8	1.95	2.76
1R0M	1.0	0.10	150	0.95	0.09	2.1	2.1	2.2	1.50	2.12
1R5M	1.5	0.15	134	0.97	0.09	1.7	1.8	1.8	1.20	1.70
2R2M	2.2	0.20	108	0.97	0.11	1.5	1.6	1.6	1.10	1.56
3R3M	3.3	0.27	83	0.98	0.13	1.2	1.3	1.3	0.95	1.34
4R7M	4.7	0.40	68	0.96	0.15	0.96	1.0	1.1	0.75	1.06
5R6M	5.6	0.45	60	0.99	0.16	0.90	0.93	0.94	0.70	0.99
6R8M	6.8	0.53	55	0.99	0.19	0.83	0.86	0.87	0.60	0.85
8R2M	8.2	0.70	50	0.99	0.22	0.74	0.77	0.78	0.50	0.71
100M	10	0.78	48	0.99	0.27	0.67	0.69	0.70	0.50	0.71
150M	15	1.19	33	0.99	0.34	0.53	0.55	0.56	0.42	0.59
220M	22	1.58	26	0.99	0.40	0.45	0.47	0.48	0.35	0.49
330M	33	2.50	23	0.99	0.48	0.37	0.38	0.39	0.30	0.42
470M	47	3.48	17.0	0.99	0.83	0.31	0.32	0.33	0.25	0.35
680M	68	5.10	14.9	0.99	0.90	0.25	0.26	0.27	0.19	0.26
101M	100	8.0	11.2	0.99	1.39	0.21	0.22	0.22	0.15	0.21
151M	150	11.7	9.90	0.99	2.10	0.17	0.17	0.18	0.12	0.16
221M	220	15.2	8.05	0.99	3.02	0.14	0.15	0.15	0.11	0.15

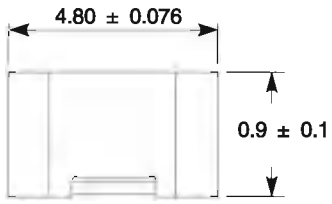
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +85 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +125 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +125 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7 " reel; 3500/13 " reel

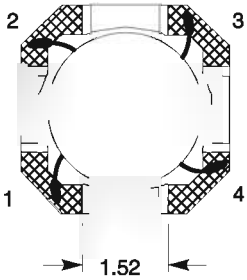
PHYSICAL CHARACTERISTICS & WINDING:

Dimensions are in mm

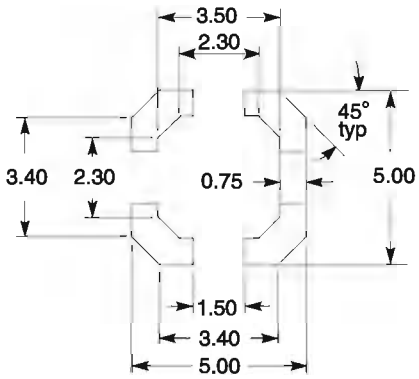




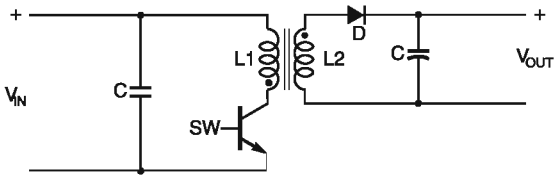




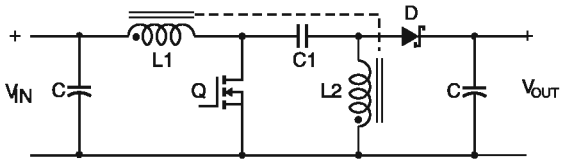
Recommended
Land Pattern



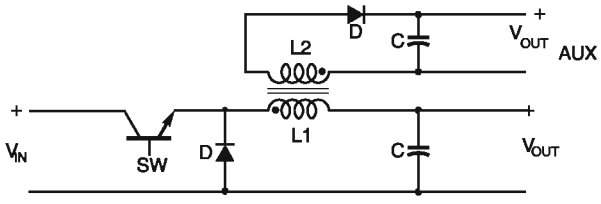
Dimensions are in mm



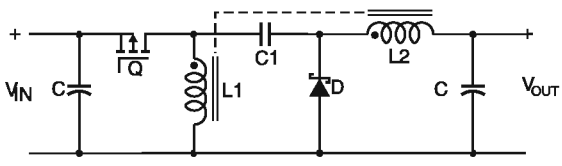
Typical Flyback Converter



Typical SEPIC schematic



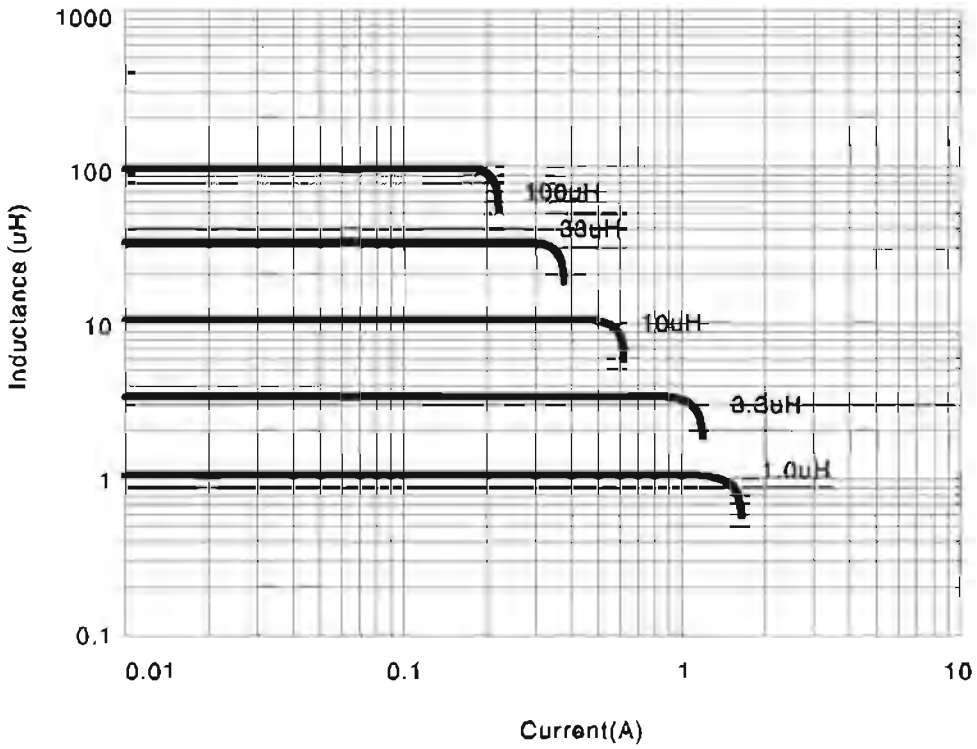
Typical Buck Converter with auxiliary output



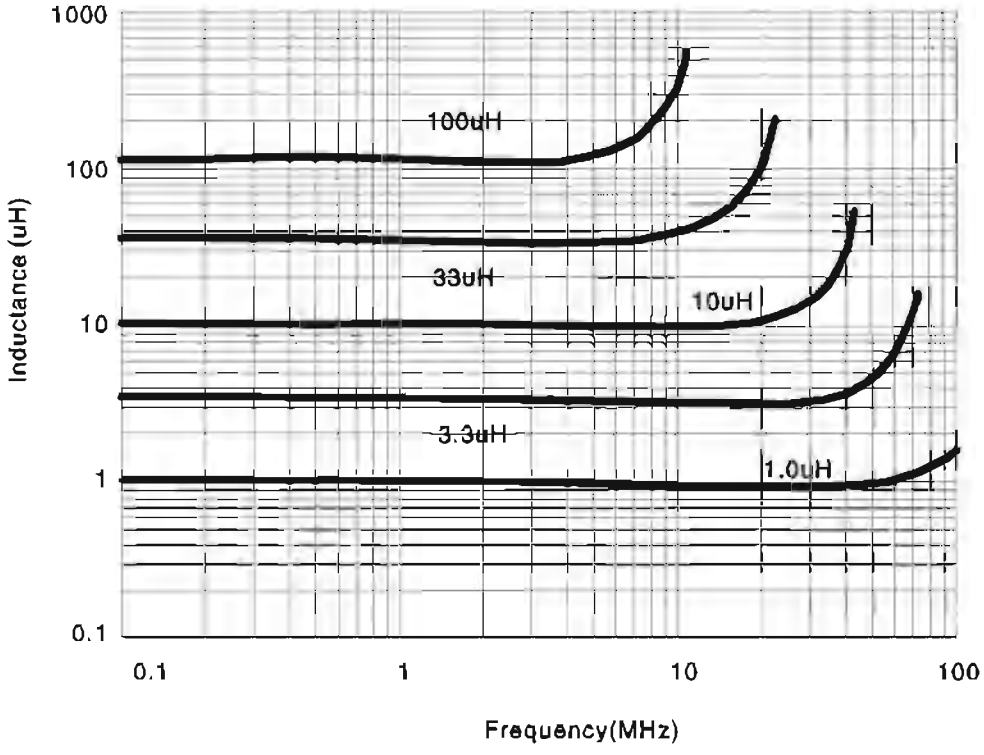
Typical Zeta schematic

PERFORMANCE CURVE:

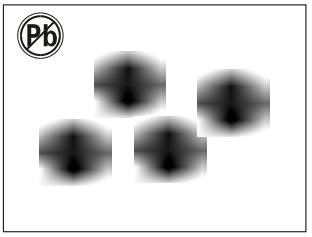
TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH5030D SERIES



FEATURES:

- Only 3.0 mm high and 5 mm square
- Ideal for use in flyback, multi–output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- UL Certified per File E219588

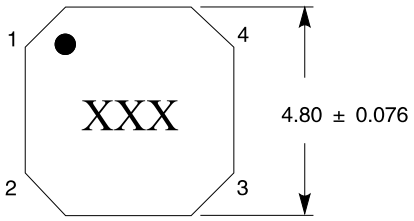
ELECTRICAL CHARACTERISTICS:

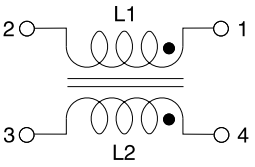
Part number SDRH5030D–	Inductance (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
R57N	0.57 ±30%	0.031	233	0.93	0.07	5.60	5.80	6.03	2.30	3.25
R78N	0.78 ±30%	0.038	172	0.94	0.08	4.60	4.80	5.00	2.25	3.18
1R0N	1.0 ±30%	0.042	153	0.95	0.09	4.30	4.49	4.67	2.20	3.11
1R5M	1.5 ±20%	0.048	118	0.97	0.09	3.90	4.20	4.30	2.05	2.90
2R2M	2.2 ±20%	0.067	87.0	0.98	0.10	2.80	2.98	3.07	1.95	2.76
3R3M	3.3 ±20%	0.077	61.0	0.98	0.10	2.50	2.70	2.80	1.70	2.40
4R7M	4.7 ±20%	0.111	49.0	0.99	0.11	2.10	2.20	2.20	1.40	1.98
5R6M	5.6 ±20%	0.125	44.0	0.99	0.11	1.80	1.80	1.89	1.35	1.91
6R8M	6.8 ±20%	0.159	40.0	0.99	0.12	1.40	1.48	1.48	1.20	1.70
100M	10 ±20%	0.210	28.0	0.99	0.13	1.20	1.20	1.20	1.05	1.48
150M	15 ±20%	0.298	23.0	0.99	0.15	1.00	1.17	1.17	0.85	1.20
220M	22 ±20%	0.452	17.0	>0.99	0.17	0.89	0.98	0.98	0.70	0.99
330M	33 ±20%	0.565	16.0	>0.99	0.20	0.73	0.77	0.78	0.60	0.85
470M	47 ±20%	0.806	12.0	>0.99	0.24	0.59	0.63	0.65	0.50	0.71
680M	68 ±20%	1.13	9.00	>0.99	0.29	0.50	0.54	0.55	0.43	0.61
101M	100 ±20%	1.79	8.44	>0.99	0.37	0.47	0.54	0.56	0.33	0.47
151M	150 ±20%	2.43	6.72	>0.99	0.46	0.38	0.43	0.45	0.28	0.40
221M	220 ±20%	3.30	5.53	>0.99	0.54	0.31	0.35	0.36	0.24	0.34
331M	330 ±20%	5.36	4.17	>0.99	0.65	0.25	0.25	0.32	0.18	0.25
471M	470 ±20%	7.51	3.52	>0.99	0.76	0.21	0.24	0.26	0.15	0.21
681M	680 ±20%	10.8	2.93	>0.99	0.89	0.17	0.20	0.21	0.13	0.18
102M	1000 ±20%	16.5	2.33	>0.99	1.20	0.15	0.17	0.17	0.10	0.14

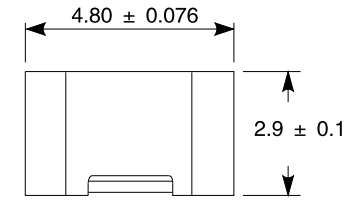
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage Inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +85 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +125 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +125 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7″ reel; 3500/13″ reel

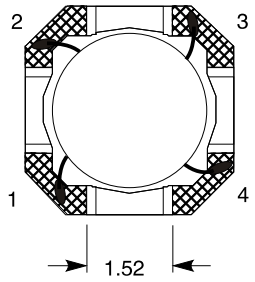
PHYSICAL CHARACTERISTICS & WINDING:

Dimensions are in mm

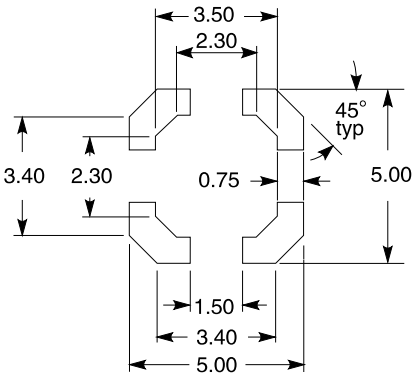




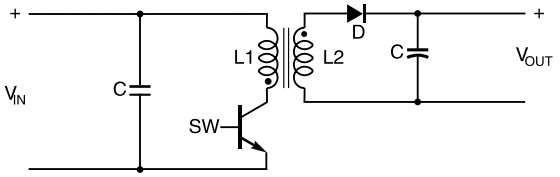




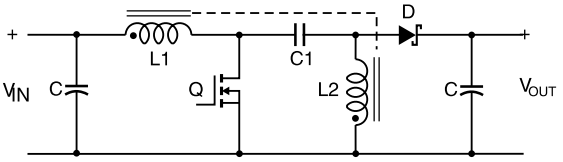
Recommended
Land Pattern



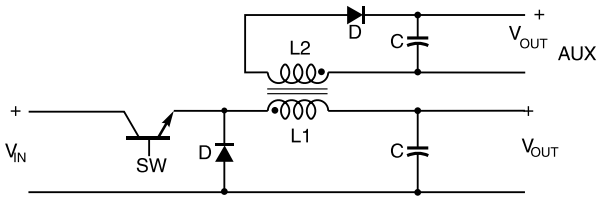
Dimensions are in mm



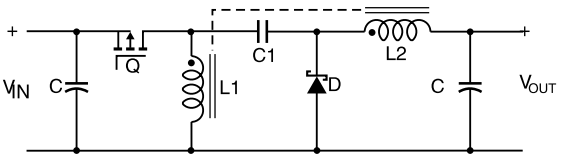
Typical Flyback Converter



Typical SEPIC schematic



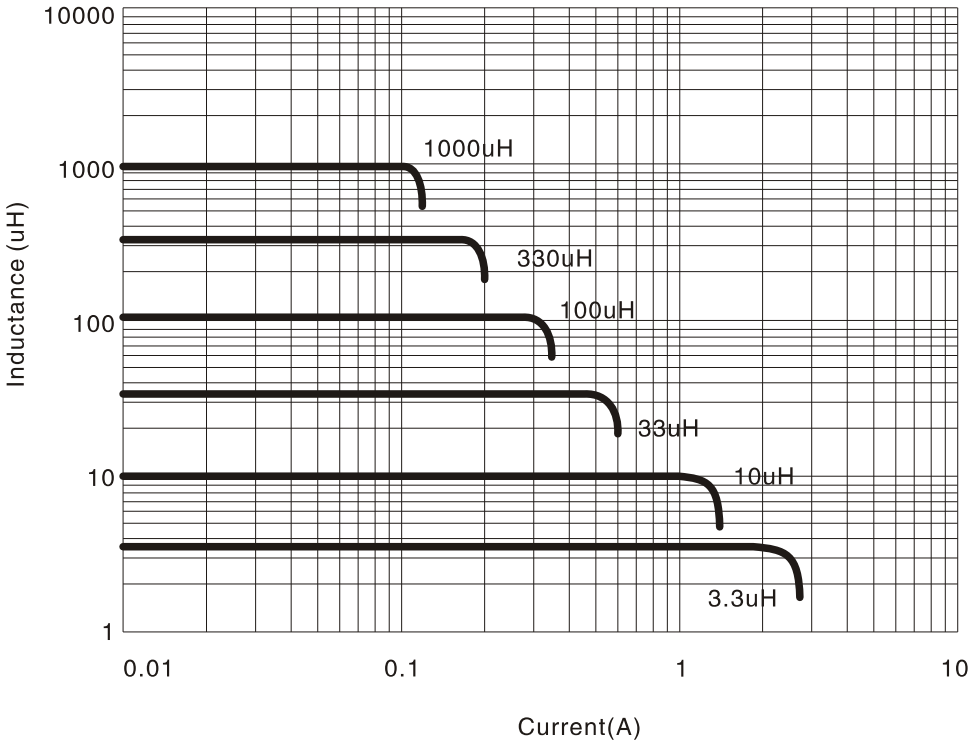
Typical Buck Converter with auxiliary output



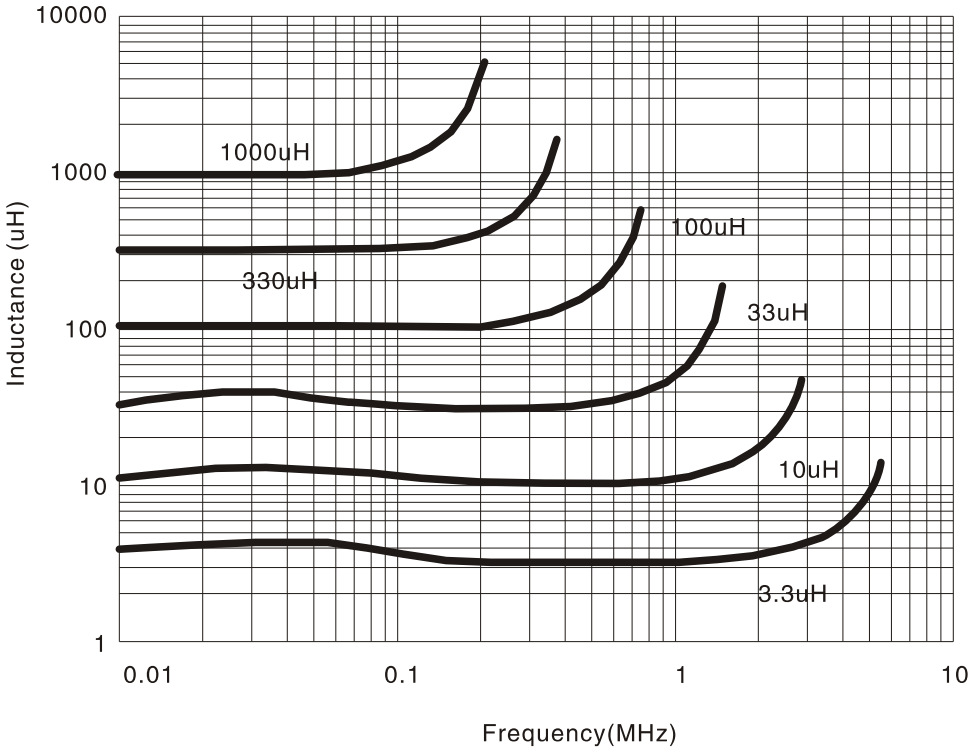
Typical Zeta schematic

PERFORMANCE CURVE:

TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



SMD COUPLED INDUCTORS
SDRH5228D SERIES

FEATURES:

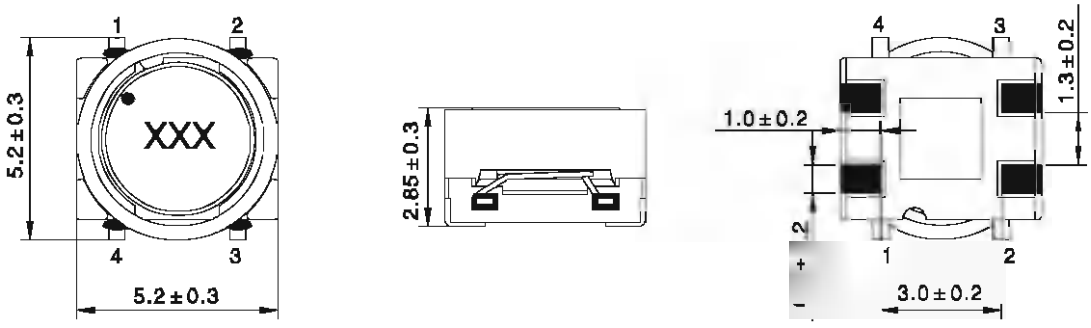
- 5.2X5.2 mm footprint, 2.85mm high coupled inductors.
- Low DCR and excellent current handling.
- They can be used as two single inductors connected in parallel, as a 1 : 1 transformer or as an autotransformer when connected in series.
- Winding to winding isolation (hipot) up to 2500 VDC.

ELECTRICAL CHARACTERISTICS:

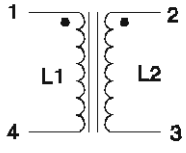
Part Number	L (uH) ± 20%	DCR (Ω)Max	SRF (MHz)Typ	Coupling Coefficient Typ	Isat(A) Typ			Irms(A) Typ	
					10% Drop	20% Drop	30% Drop	Both winding	One winding
SDRH5228D–100M	10	0.3	28.0	0.99	1.2	1.3	1.4	0.682	0.964
SDRH5228D–220M	22	0.65	16.0	0.99	0.78	0.87	0.95	0.438	0.619
SDRH5228D–330M	33	0.95	15.0	0.99	0.64	0.71	0.78	0.341	0.482
SDRH5228D–680M	68	1.8	11.0	0.99	0.45	0.5	0.54	0.255	0.361
SDRH5228D–101M	100	2.65	10.0	0.99	0.37	0.41	0.45	0.205	0.29
SDRH5228D–151M	150	4.3	6.7	1.00	0.3	0.33	0.36	0.155	0.219
SDRH5228D–221M	220	6.1	5.8	1.00	0.25	0.28	0.3	0.14	0.196

1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value.
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value.
3. SRF measured using an Agilent/HP4294A network analyzer or equivalent. When leads are connected in parallel, SRF is the same value.
4. Isat: DC current, at which the inductance drops the specified amount from its value without current. It is the sum of the current flowing in both windings.
5. Irms, both windings: Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient.
6. Irms, one winding: Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient.
7. Ambient temperature –40 ℃ to +85 ℃ with (40 ℃ rise) Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +60 ℃
10. Winding to winding isolation (hipot) 2500 VDC
11. Resistance to soldering heat Three reflows at >217 ℃ for 90 seconds (+260 ℃ ± 5 ℃ for 20–40 seconds)

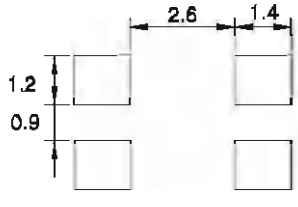
PHYSICAL CHARACTERISTICS & WINDING:



WINDING

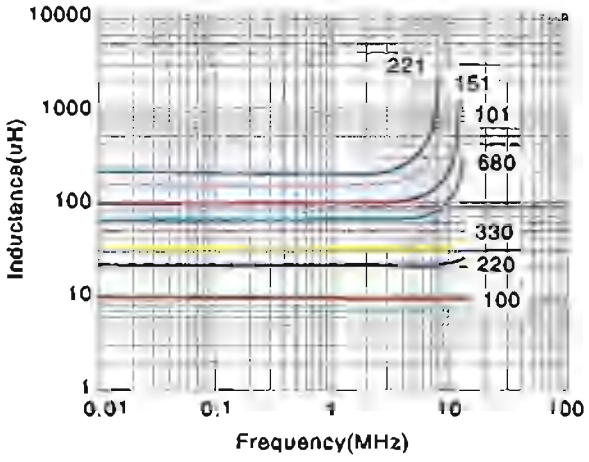


LAND PATTERN

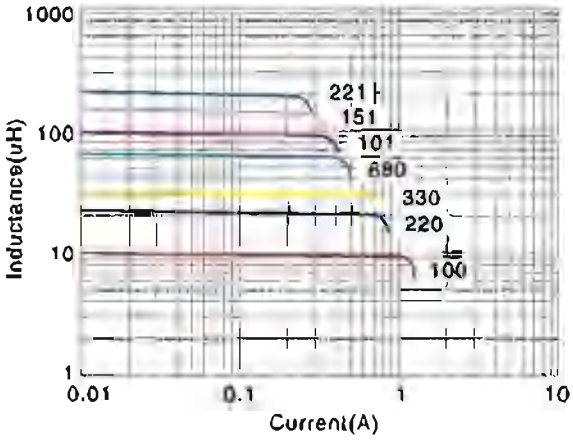


PERFORMANCE CURVE:

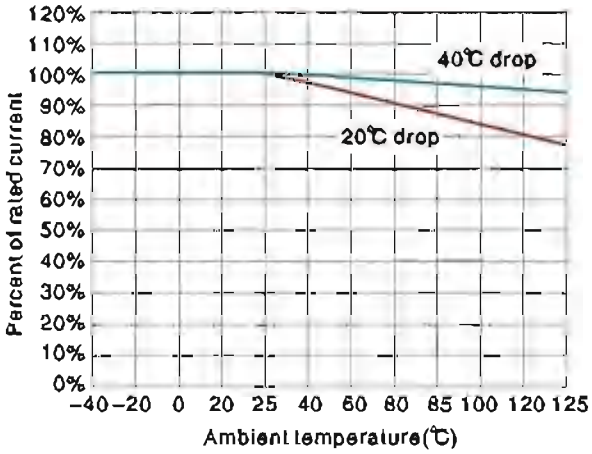
L vs Frequency(In parallel mode)



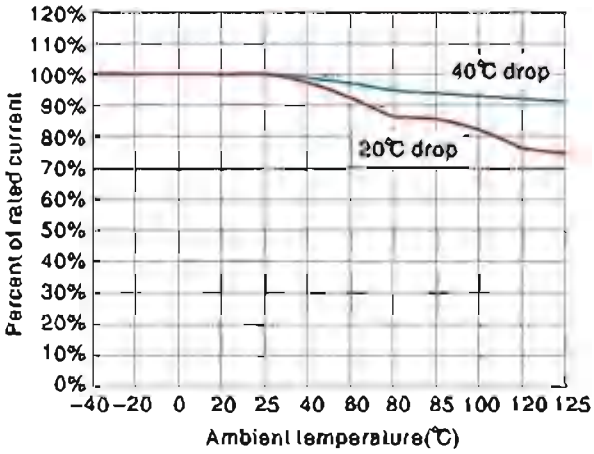
L vs Current(In parallel mode)



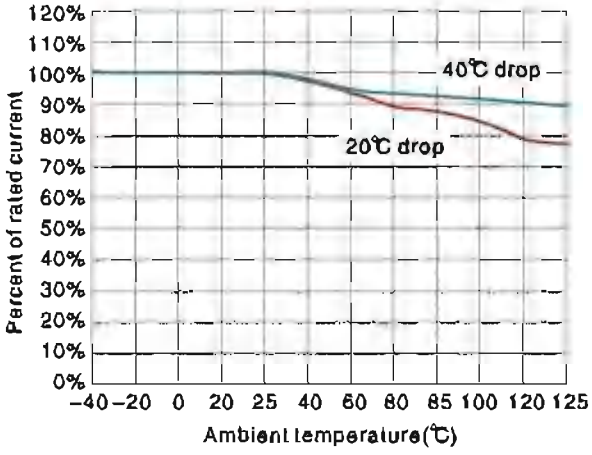
Current derating
100 (In parallel mode)



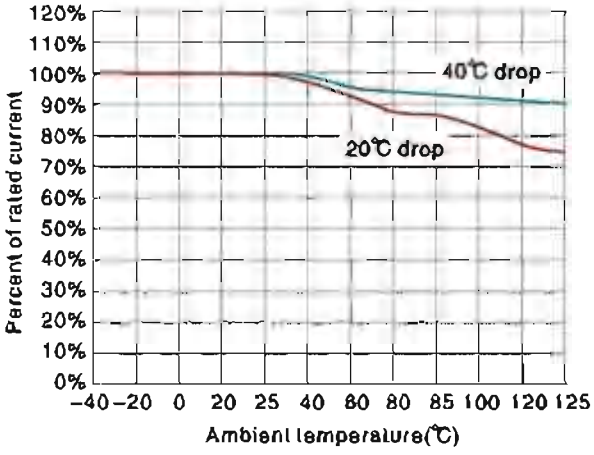
Current derating
220 (In parallel mode)



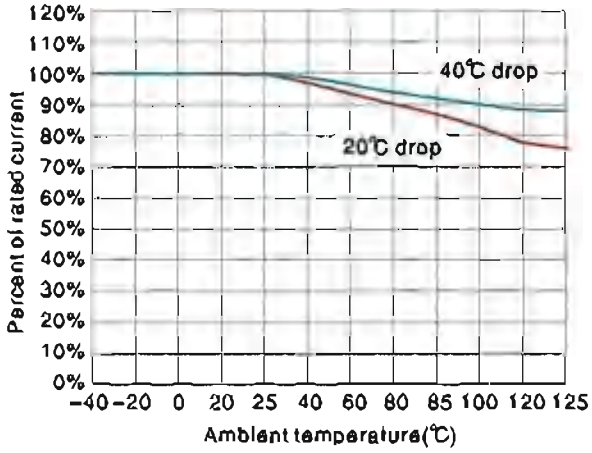
Current derating
330 (In parallel mode)



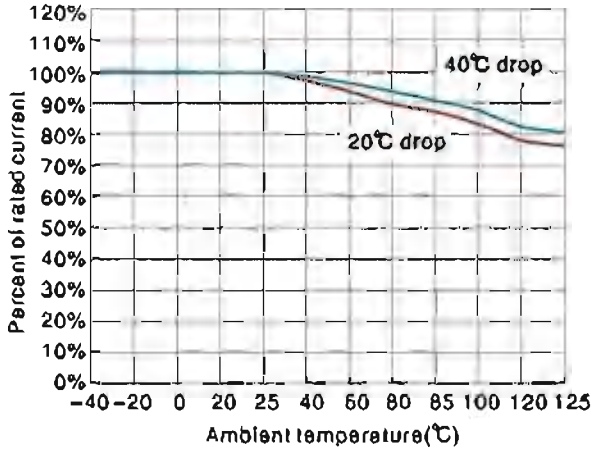
Current derating
680 (In parallel mode)



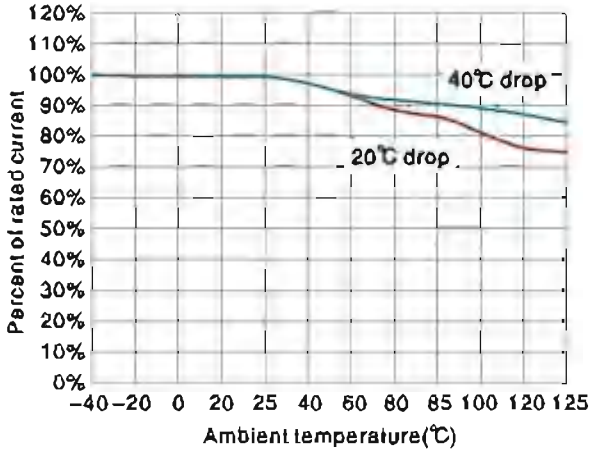
Current derating
101 (In parallel mode)



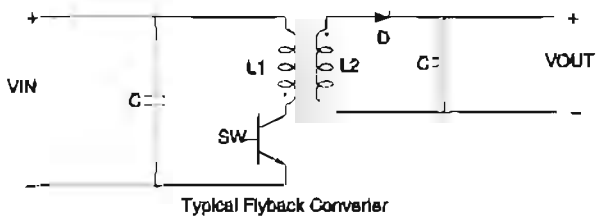
Current derating
151 (In parallel mode)



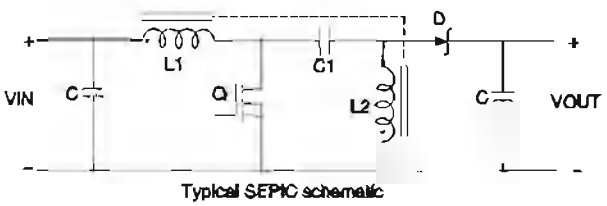
Current derating
221 (In parallel mode)



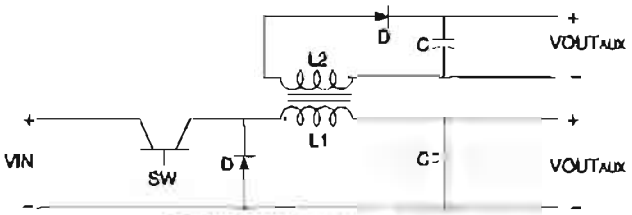
TYPICAL APPLY:



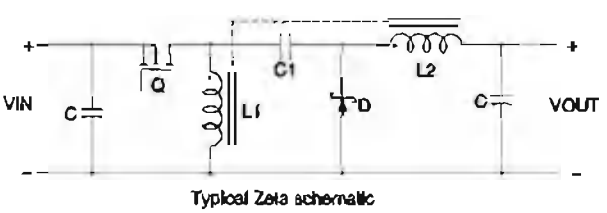
Typical Flyback Converter



Typical SEPIC schematic

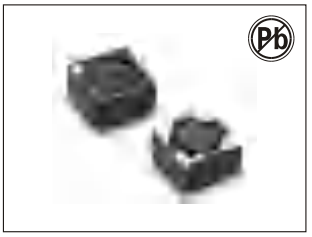


Typical Buck Converter with auxiliary output



Typical Zeta schematic

COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH5230D SERIES



FEATURES:

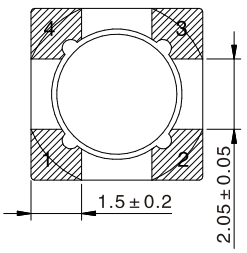
- Only 3.0 mm high and 5 mm square
- Ideal for use in flyback, multi–output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- UL Certified per File E219588

ELECTRICAL CHARACTERISTICS@25℃:

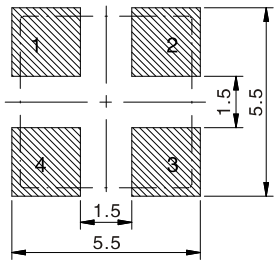
Part number SDRH5230D–	Inductance (uH) 100KHz,0.1V	DCR max (mΩ) each winding	SRF typ (MHz)	Coupling coefficient typ	Leakage L typ (uH)	Irms (A)	Isat (A)
1R0N	1.0 ±30%	45	190	0.96	0.07	2.9	5.0
1R5N	1.5 ±30%	68	110	0.97	0.08	2.7	3.7
2R2N	2.2 ±30%	72	95	0.97	0.125	2.5	3.2
3R3N	3.3 ±30%	120	50	0.98	0.13	1.9	2.6
4R7N	4.7 ±30%	145	45	0.98	0.16	1.6	1.9
6R8N	5.6 ±30%	240	42	0.98	0.17	1.4	1.7
8R2N	6.8 ±30%	265	40	0.98	0.185	1.3	1.6
10M	10 ±20%	300	35	0.99	0.19	1.2	1.5
15M	15 ±20%	465	24	0.99	0.28	0.9	1.4
22M	22 ±20%	650	21	0.99	0.41	0.8	1.0
33M	33 ±20%	1025	19	0.99	0.63	0.7	0.9
47M	47 ±20%	1200	18	0.99	0.85	0.6	0.7

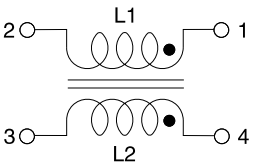
PHYSICAL CHARACTERISTICS & WINDING:

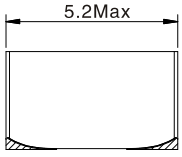
Dimensions are in mm

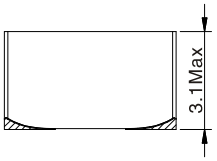


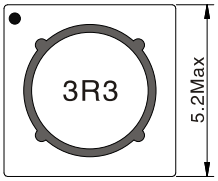
Recommended Land Pattern







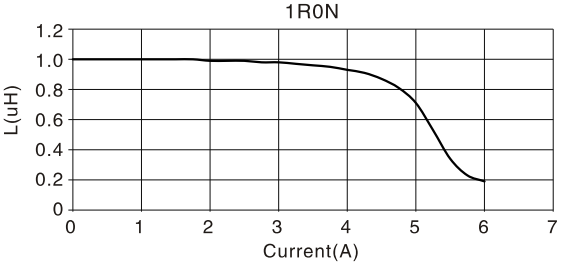




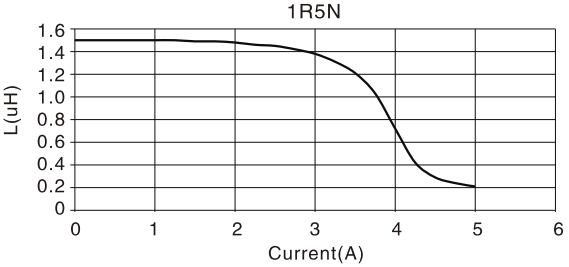
1. Rated voltage 250Vrms
2. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
3. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
4. Operating temperature Component: –40 ℃ to +125 ℃ (ambient + temp rise)
5. Tape and reel packaging: –40 ℃ to +80 ℃
6. Winding to winding isolation 1500 Vrms, 3mA,3S

ELECTRICAL CHARACTERISTICS@25℃:

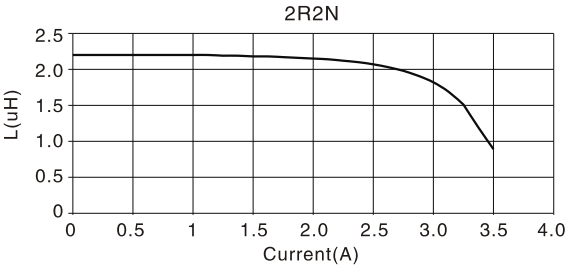
1R0N



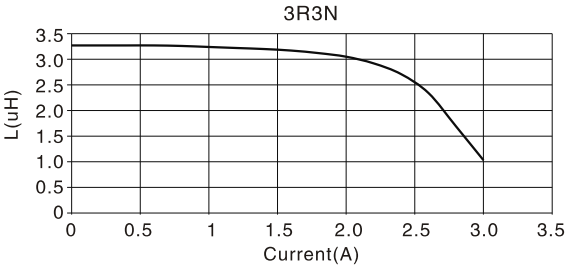
1R5N



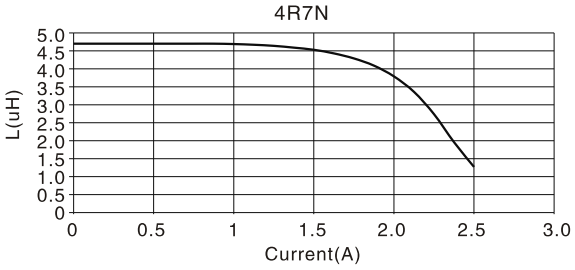
2R2N



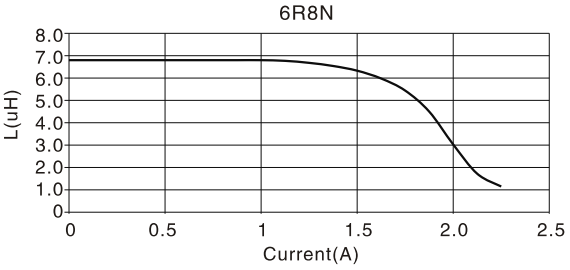
3R3N



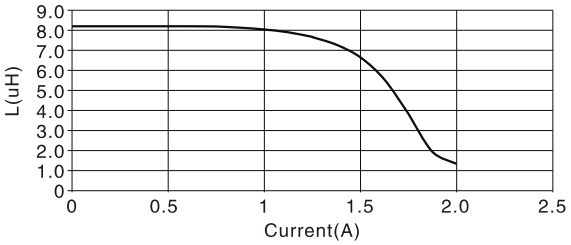
4R7N



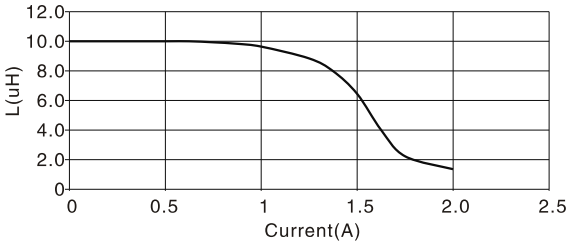
6R8N



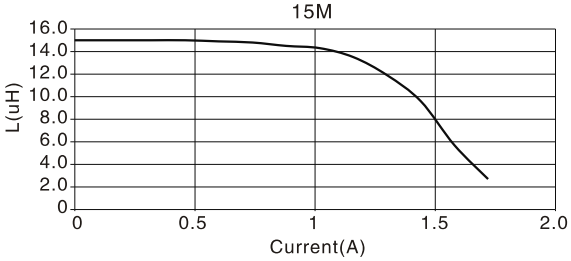
8R2N



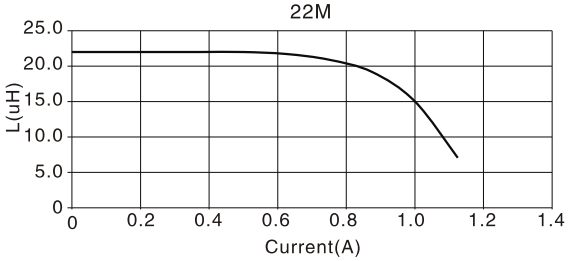
10M



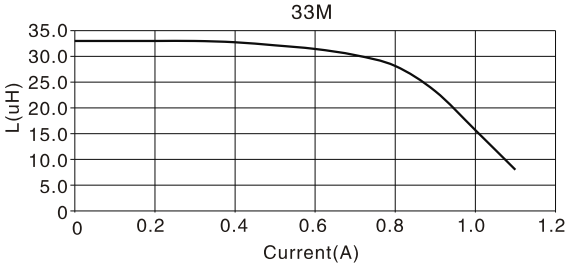
15M



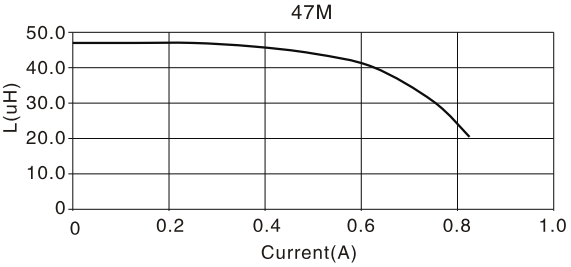
22M



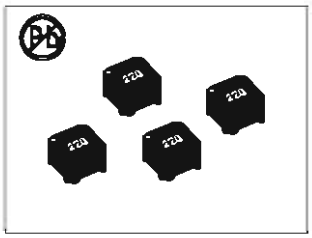
33M



47M



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH6235D SERIES



FEATURES:

- Only 3.5 mm high and 6.0 mm square
- Ideal for use in flyback, multi-output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- AEC-Q200 Grade 1 (40℃ to +125℃)

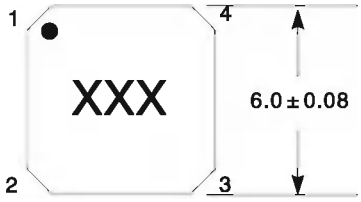
ELECTRICAL CHARACTERISTICS:

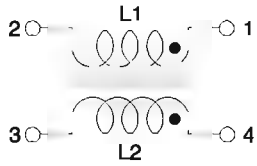
Part number SDRH6235D-	Inductance ±20% (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
6R8M	6.8	0.120	31	0.99	0.10	2.80	3.00	3.12	1.40	1.98
100M	10	0.157	26	0.99	0.12	2.50	2.70	2.80	1.30	1.83
220M	22	0.300	15	>0.99	0.15	1.50	1.67	1.73	0.85	1.20
470M	47	0.620	9.7	>0.99	0.21	0.90	0.98	0.99	0.60	0.85
101M	100	1.20	7.0	>0.99	0.45	0.62	0.72	0.74	0.40	0.56
471M	470	3.50	3.0	>0.99	0.61	0.18	0.22	0.23	0.25	0.35
102M	1000	7.00	1.9	>0.99	1.05	0.12	0.14	0.15	0.15	0.21
152M	1500	10.8	1.5	>0.99	1.70	0.12	0.12	0.13	0.14	0.20
202M	2000	16.0	1.3	>0.99	2.10	0.08	0.11	0.12	0.11	0.16

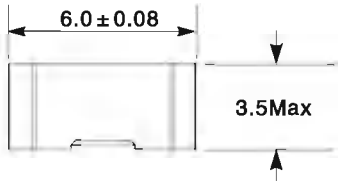
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +125 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +165 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +165 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7 " reel; 3500/13 " reel

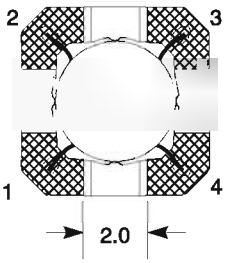
PHYSICAL CHARACTERISTICS & WINDING:

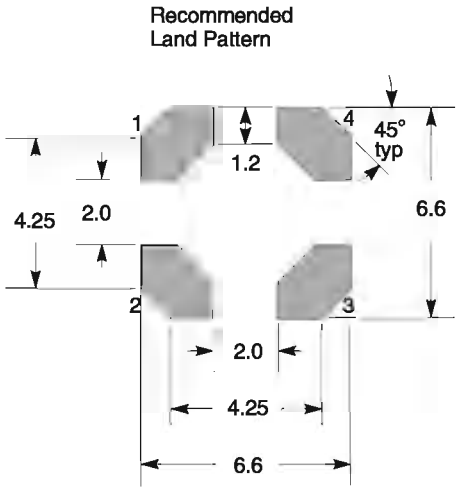
Dimensions are in mm

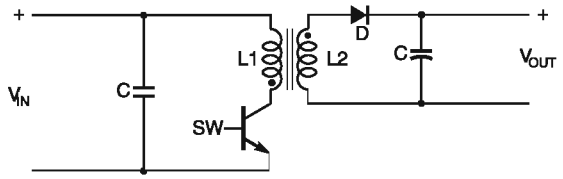




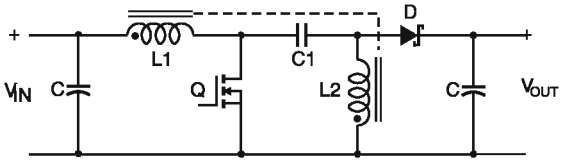




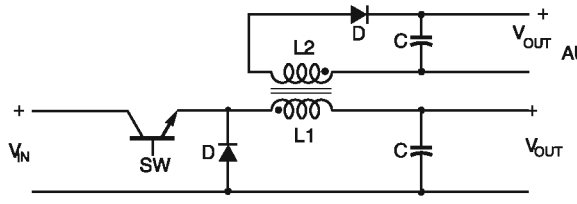




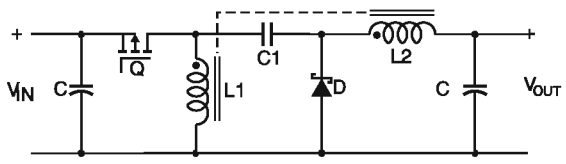
Typical Flyback Converter



Typical SEPIC schematic



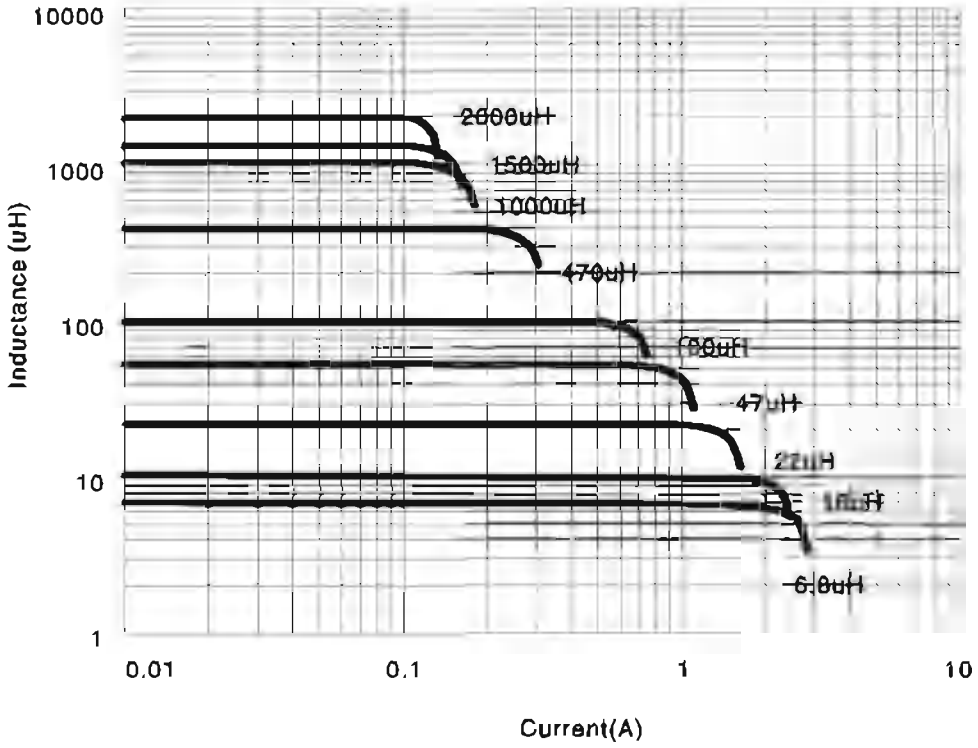
Typical Buck Converter with auxiliary output



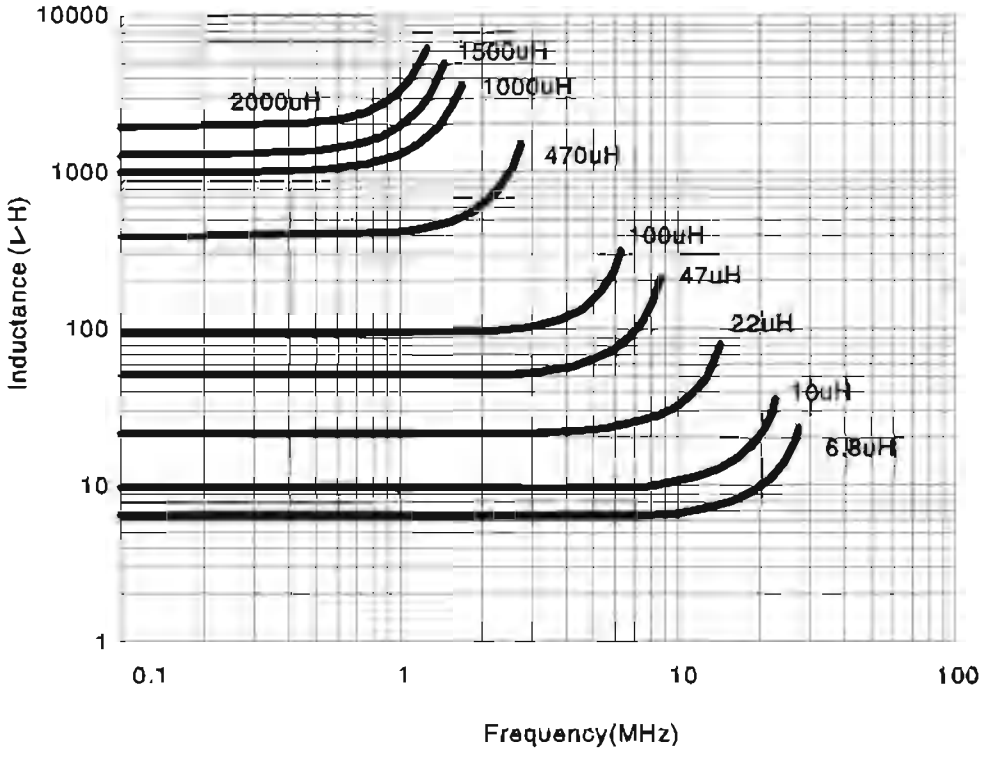
Typical Zeta schematic

PERFORMANCE CURVE:

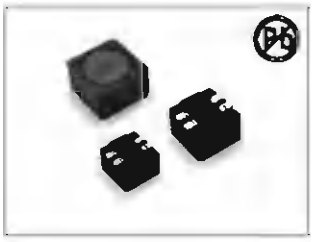
TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY



COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH7342D SERIES



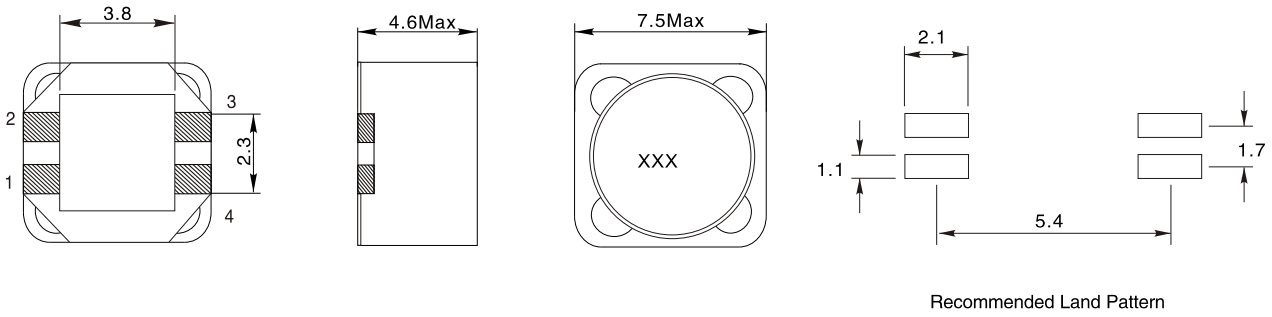
FEATURES:

- Only 4.6 mm high and 7.5 mm square
- Ideal for use in both power line and signal line applications
- Common– and differential–mode filtering in a single device
- Up to 230 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

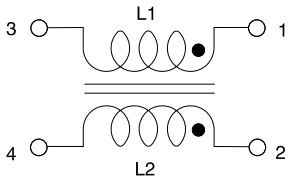
ELECTRICAL CHARACTERISTICS:

Partnumber	Common mode impedance Max (KΩ)	Cutoff frequency (MHz)	Inductance (μH)		DCR max (Ω)	Isolation (Vrms)	Irms (A)
			Min	Nom			
SDRH7342D–2R5M	3.07@53 MHz	89	2.00	2.5	0.033	200	2.17
SDRH7342D–3R3M	3.86@50 MHz	70	2.64	3.3	0.037	200	2.05
SDRH7342D–4R7M	4.93@37 MHz	55	3.76	4.7	0.051	200	1.74
SDRH7342D–5R6M	5.96@34 MHz	67	4.48	5.6	0.063	200	1.57
SDRH7342D–6R8M	7.85@31 MHz	79	5.44	6.8	0.070	200	1.49
SDRH7342D–8R2M	9.09@32 MHz	55	6.56	8.2	0.075	200	1.44
SDRH7342D–100M	9.15@24 MHz	63	8.00	10	0.10	200	1.24
SDRH7342D–120M	11.85@22 MHz	47	9.60	12	0.12	200	1.14
SDRH7342D–150M	14.43@20 MHz	53	12.0	15	0.13	200	1.09
SDRH7342D–180M	18.24@18 MHz	38	14.4	18	0.17	200	0.95
SDRH7342D–220M	18.37@15 MHz	49	17.6	22	0.22	200	0.84
SDRH7342D–270M	25.63@14 MHz	42	21.6	27	0.25	200	0.79
SDRH7342D–330M	26.26@14 MHz	41	26.4	33	0.27	200	0.76
SDRH7342D–390M	35.44@11 MHz	42	31.2	39	0.38	200	0.64
SDRH7342D–470M	34.38@11 MHz	38	37.6	47	0.42	200	0.61
SDRH7342D–560M	41.03@7.9 MHz	40	44.8	56	0.46	200	0.58
SDRH7342D–680M	70.55@8.5 MHz	52	54.4	68	0.60	200	0.51
SDRH7342D–820M	84.57@7.4 MHz	26	65.6	82	0.68	200	0.48
SDRH7342D–101M	89.05@6.6 MHz	24	80.0	100	0.77	200	0.45
SDRH7342D–121M	101.4@6.4 MHz	22	96.0	120	1.03	200	0.39
SDRH7342D–151M	121.2@5.5 MHz	19	120	150	1.35	200	0.34
SDRH7342D–181M	141.5@4.8 MHz	20	144	180	1.52	200	0.32
SDRH7342D–221M	133.0@4.8 MHz	25	176	220	1.72	200	0.30
SDRH7342D–271M	103.7@3.6 MHz	18	216	270	2.41	200	0.25
SDRH7342D–331M	131.7@3.8 MHz	9.1	264	330	2.70	200	0.24
SDRH7342D–391M	145.9@3.1 MHz	11	312	390	3.05	200	0.23
SDRH7342D–471M	187.2@2.7 MHz	11	376	470	4.00	200	0.20
SDRH7342D–561M	204.4@2.6 MHz	8.1	448	560	4.43	200	0.19
SDRH7342D–681M	210.0@2.2 MHz	3.3	544	680	5.00	200	0.18
SDRH7342D–821M	251.8@2.4 MHz	6.6	656	820	6.80	200	0.15
SDRH7342D–102M	276.1@2.1 MHz	5.1	800	1000	7.80	200	0.14

PHYSICAL CHARACTERISTICS & WINDING:



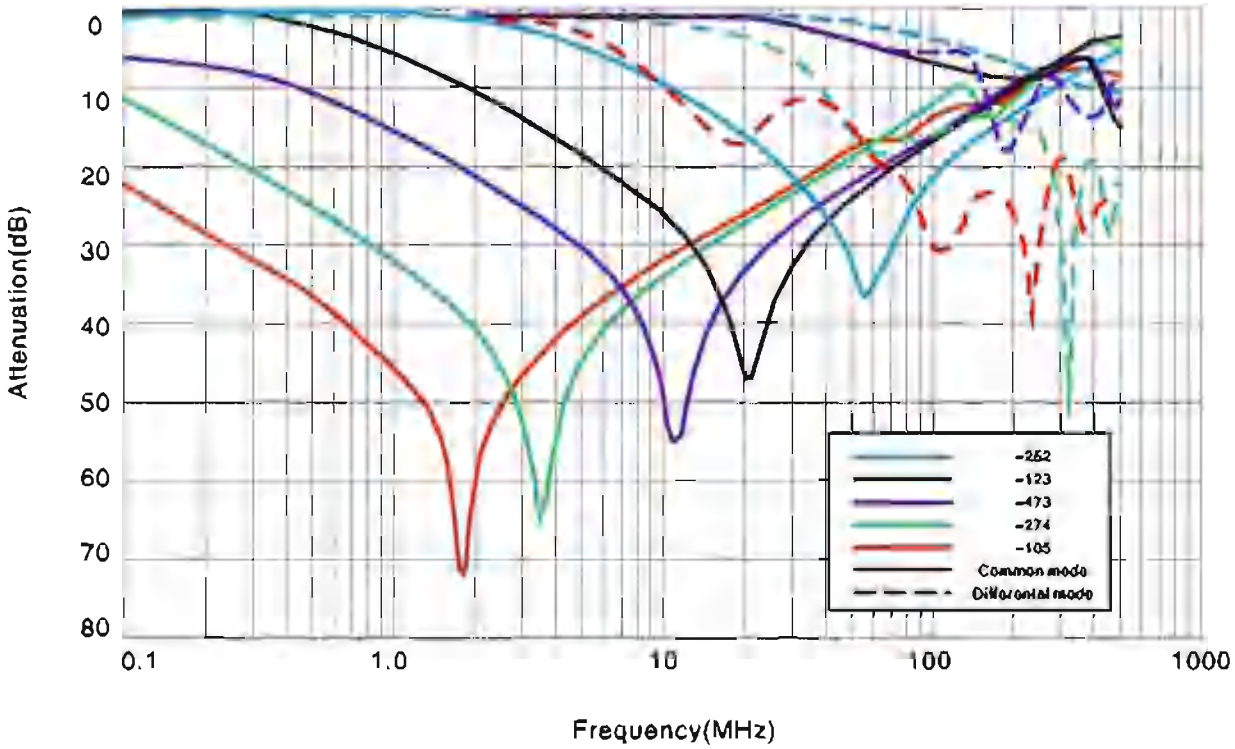
Recommended Land Pattern



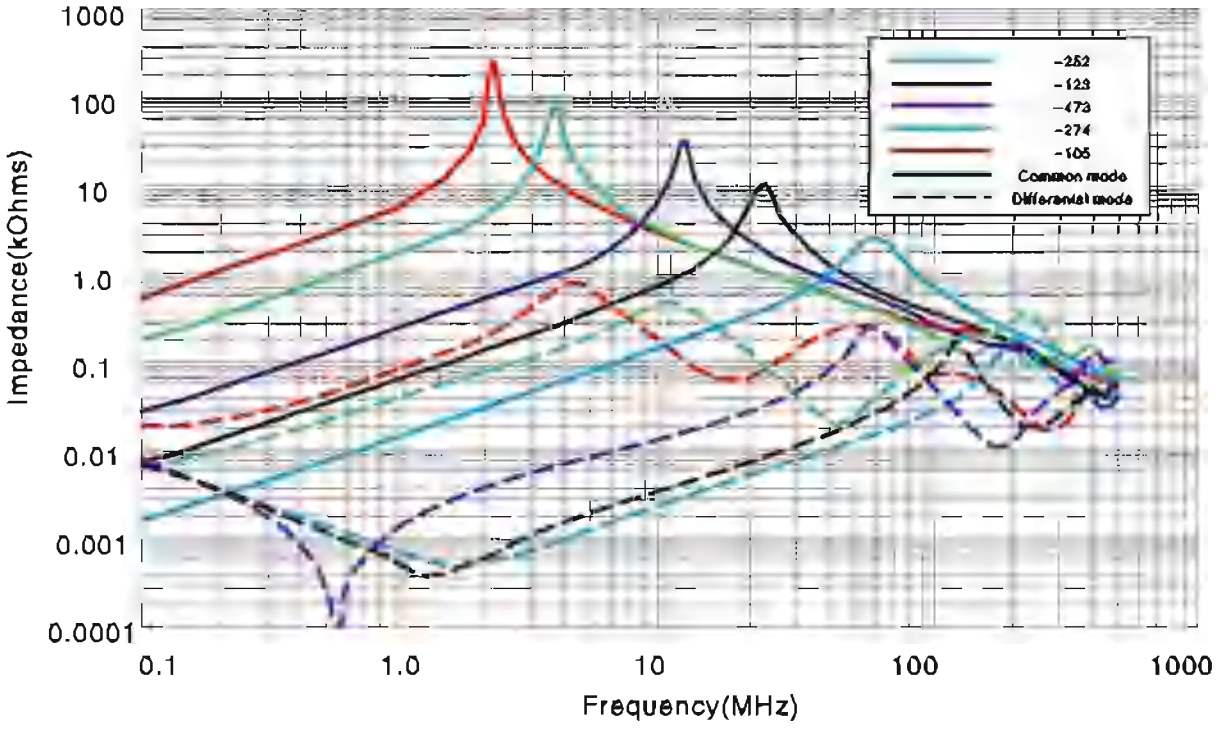
1. Frequency at which the differential mode attenuation equals –3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding–to–winding isolation 500 Vrms, one minute
5. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 ℃
7. Ambient temperature –40 ℃ to +85 ℃ with Irms current. Maximum part temperature +125 ℃ (ambient + temp rise).
8. Storage temperature Component: –40 ℃ to +125 ℃ .
9. Tape and reel packaging: –40 ℃ to +80 ℃

PERFORMANCE CURVE:

Typical Atenuation(Ref:50 Ohms)



Typical Impedance vs Frequency



SMD MULTI-LAYER COMMON MODE FILTER

FEATURES

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Ultra low profile (0.87 x 0.67 x 0.50mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive
- Operating Temperature Range -40℃ to +85℃

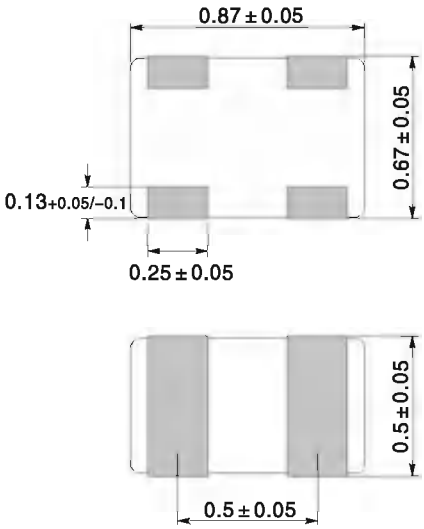
APPLICATIONS

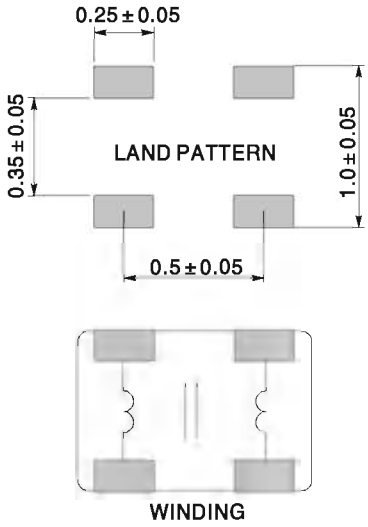
- LVDS lines in notebook computers
- USB2.0, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

SPECIFICATION OF ELECTRICAL CHARACTERISTICS

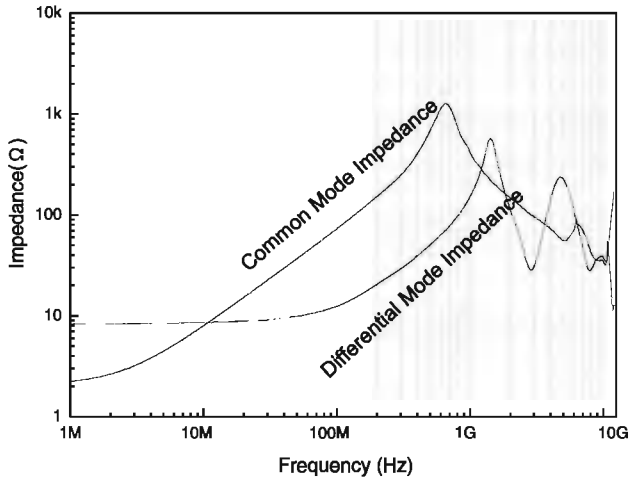
Part Number	Common mode Impedance (Ω)@100MHz	DCR (Ω)Max	Insulation Resistance (MΩ)Min	Rated current (mA)Max	Rated voltage (V)Max	Cutoff frequency (GHz)Typ
SBA0302-2-900	90±25%	6.0	10	100	5.0	4.0

APPEARANCE AND DIMENSION

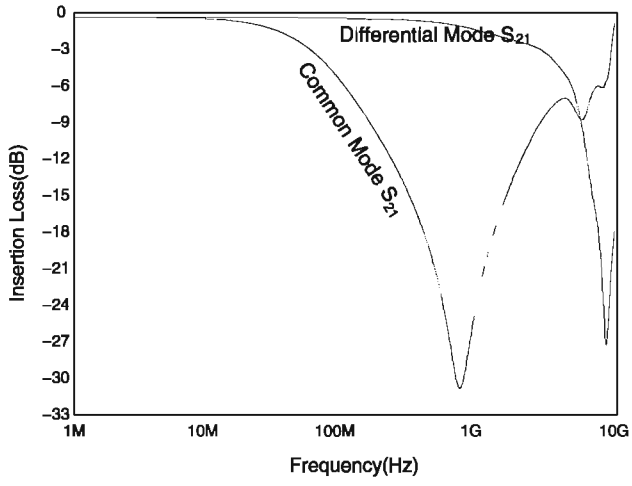




IMPEDANCE CURVES



TRANSMISSION CHARACTERISTICS (S-PARAMETER)



SMD MULTI-LAYER COMMON MODE FILTER

FEATURES

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Ultra low profile (2.0x1.2x0.8mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive
- Operating Temperature Range -40℃ to +85℃

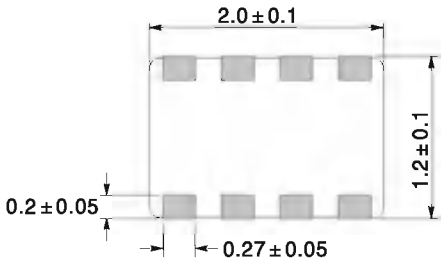
APPLICATIONS

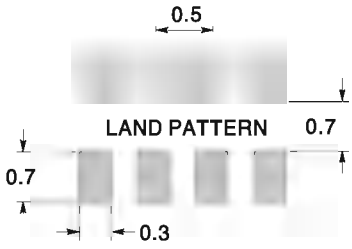
- LVDS lines in notebook computers
- USB2.0, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

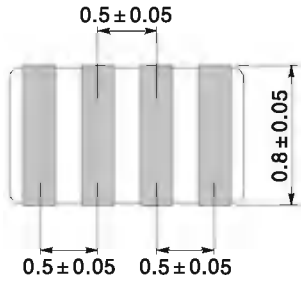
SPECIFICATION OF ELECTRICAL CHARACTERISTICS

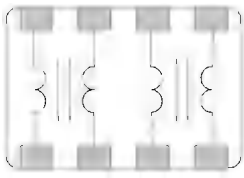
Part Number	Common mode Impedance (Ω)@100MHz	DCR (Ω)Max	Insulation Resistance (MΩ)Min	Rated current (mA)Max	Rated voltage (V)Max	Cutoff frequency (GHz)Typ
SBA0805-4-101	100±25%	4.0	10	100	5.0	3.0

APPEARANCE AND DIMENSION

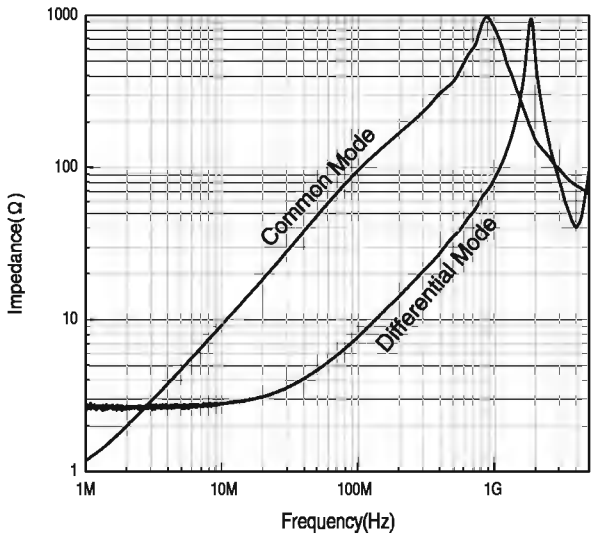




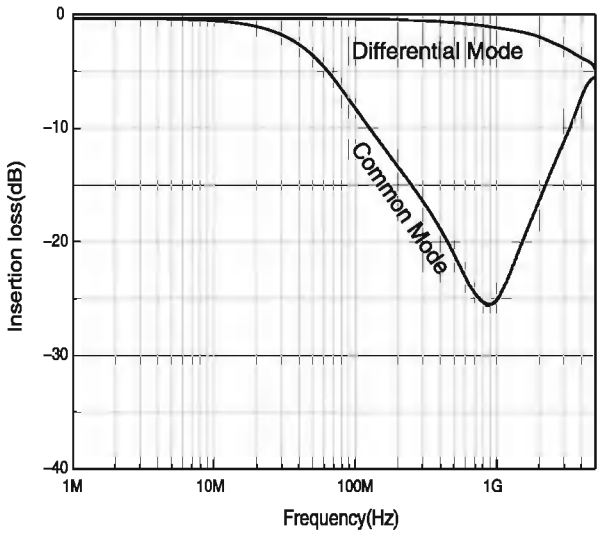




IMPEDANCE CURVES



TRANSMISSION CHARACTERISTICS (S-PARAMETER)



1. Generals

- This specification covers the engineering requirements for the SBA0504ESD-350Y (Common Mode ESD Filter)

2. Features

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Two common mode filters and four ESD suppression devices integrated
- Ultra low profile (1.27 x 1.00 x 0.60mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive.
- 1210(0504) Multilayer array type

3. Applications

- LVDS lines in notebook computers
- USB2.0, UBS3.1 Gen 1, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

4. Product specifications

4. 1 Part number code

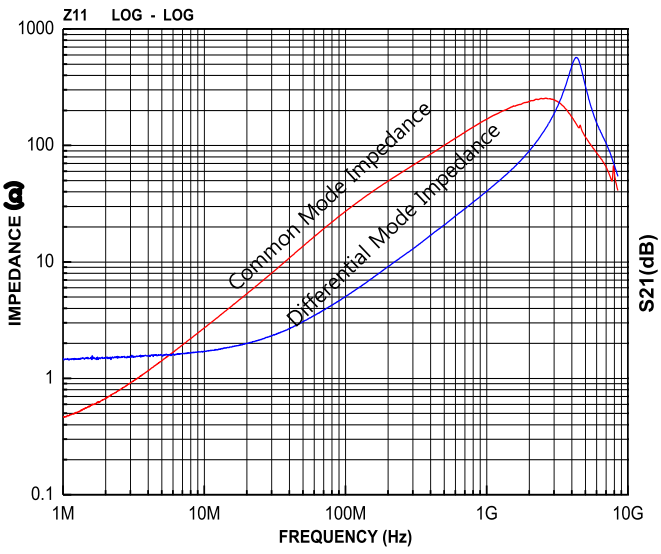
SBA	0504	ESD	350	Y
①	②	③	④	⑤

① Series name of Common Mode ESD Filter
② Dimensions, 1.27mm (L) x 1.0mm (W)
③ ESD Filter
④ Common Mode Impedance (at 100MHz), 350= 35Ω
⑤ Tolerance of common mode impedance, Y= ±25%

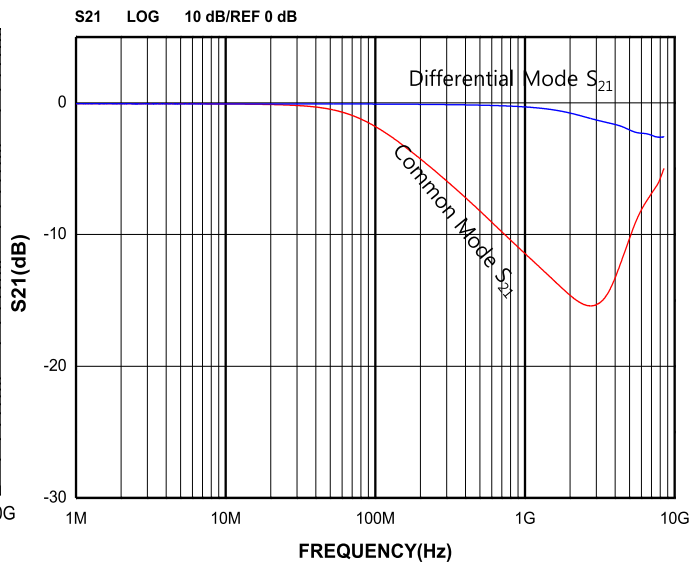
4. 2 Specification of electrical characteristics

Characteristics	Common Mode Impedance	Resistance	Leakage Current	Capacitance	Insulation Resistance	Rated Voltage	Rated Current
symbol	Z_{CM}	R_{DC}	I_L	C	IR_{CR}	V_R	I_R
Units	Ω	Ω	μA	pF	MΩ	Volt	mA
Test Condition	@100MHz	25℃±2℃	5V	0.5Vrms @1MHz	5V	25℃±2℃	25℃±2℃
Value	35(±25%)	Max 4.0	Max 1.0	Max 1.7	Min 10	5	Max100

- Impedance Curves



-Transmission characteristics (S-parameter)



4. 3 Operating Temperature

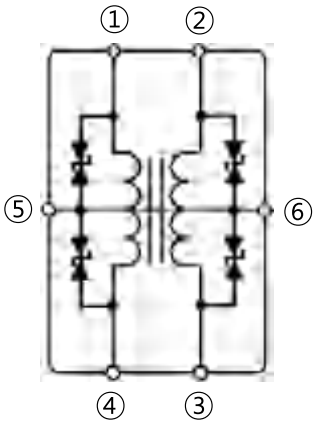
DESCRIPTION	REQUIREMENTS
Operating Temperature	-40℃ ~ + 85℃ (including self-temperature rise)

5. Equivalent Circuit & Recommended Foot print & Stencil mask

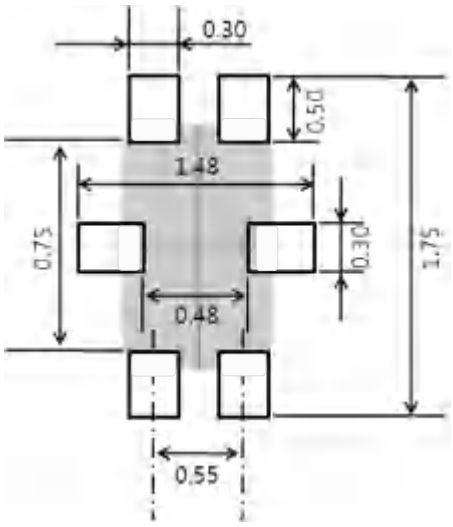
PIN NUMBER	DESCRIPTION
①~④	DATA LINE
⑤, ⑥	GROUND

Unit : mm

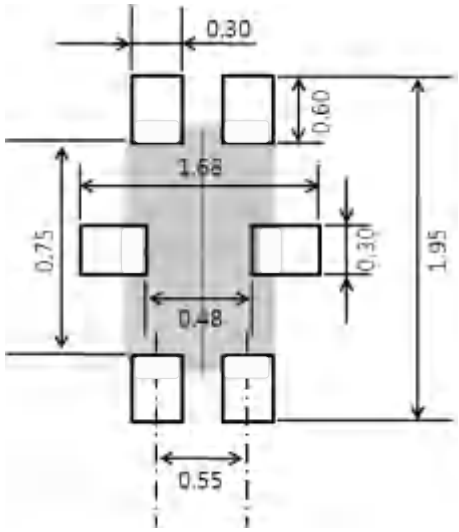
Stencil Mask T : 0.10mm



[Equivalent circuit]



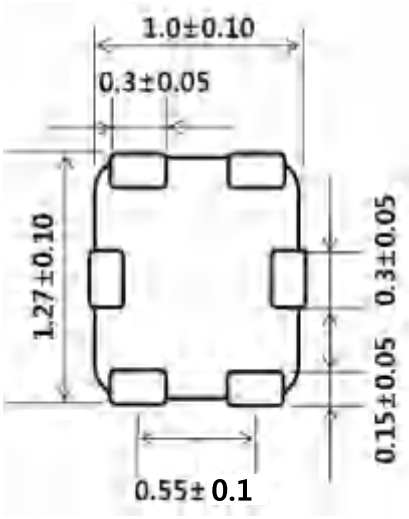
[Foot print]



[Stencil Mask]

6. Appearance and Dimension

Unit : mm



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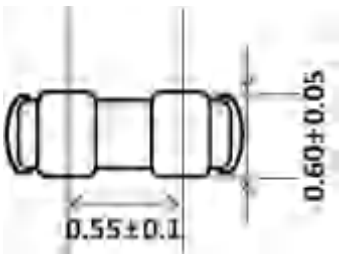
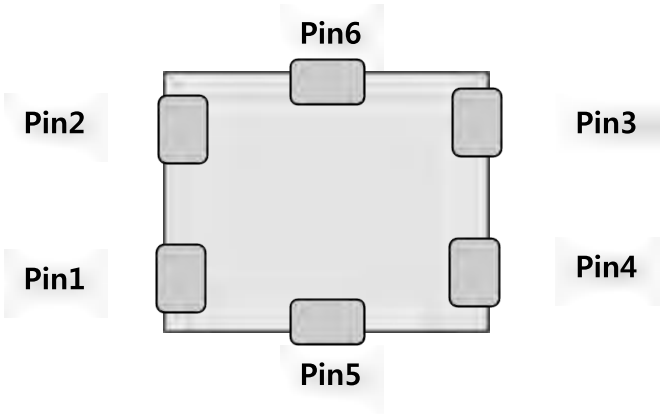


<side>

7. Test method of Electrical property

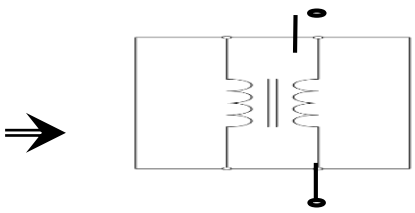
- PIN INDEX



ITEM	DESCRIPTION	SOURCE	EQUIPMENT
Rdc	Pin 1-4, 2-3	10mA DC Source	Source Meter
CM Impedance	Pin 1-2(Short) to Pin 3-4(Short)	500mV	LCR Meter (3GHz)
IL	Pin 5 or 6 to Pin 1, 2, 3, 4	5V DC Source	Source Meter
IR_{CR}	Pin1 -2 or Pin3-4	5V DC Source	Source Meter

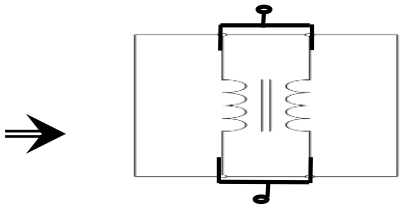
7. 1 Rdc (Model: KEITHLEY 2400)

- Off power and On power.
- Press button 'Ω' of MEAS.
- Measure Rdc value using test fixture.



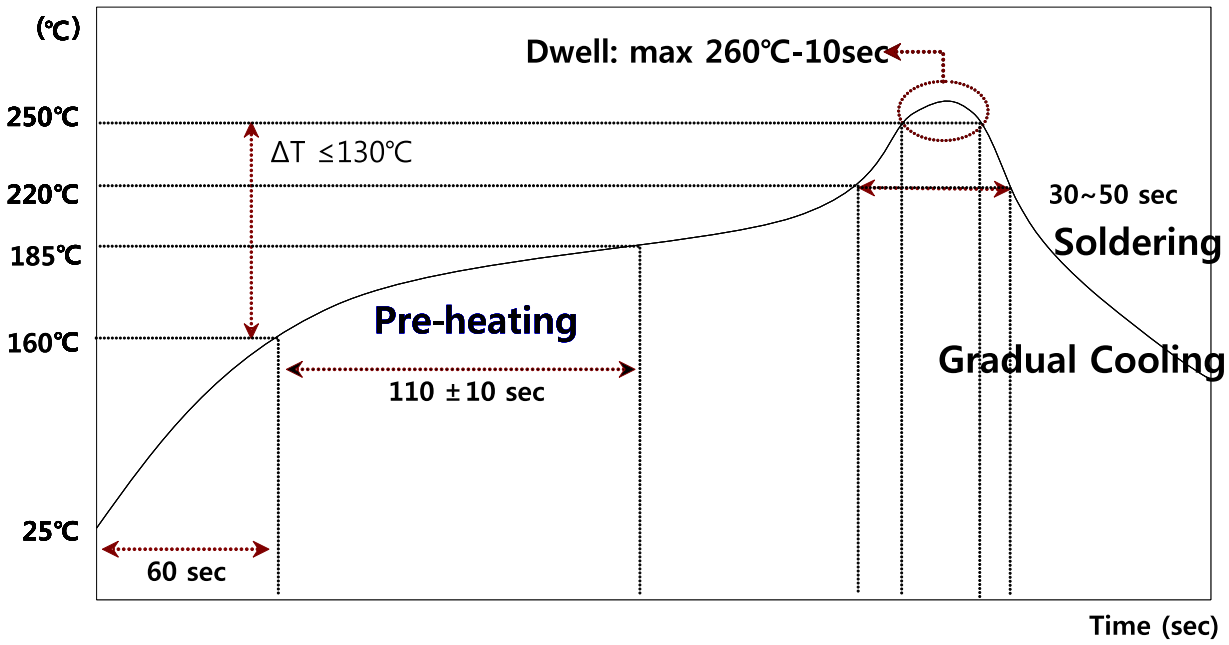
7. 2 Common Mode Impedance (Model: Agilent 4287A)

- Calibrate equipment
- Measure CM Impedance (at 100MHz) using test fixture.



8. Reflow condition

8. 1 Recommended soldering profile (Lead-free condition)



8. 2 Recommended Lead-free solder paste

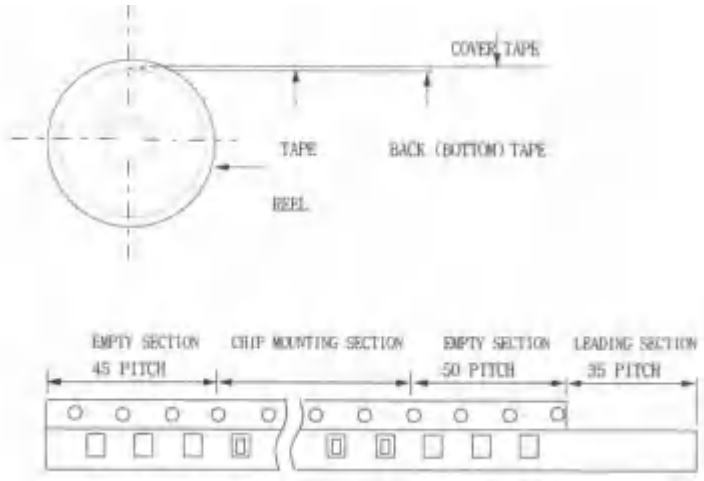
- Supplier : Tamura Donghwa
- Main composition : Sn-Ag-Cu
- Ratio of composition : 96.5%-3.0%-0.5%

8. 3 Recommended hand solder

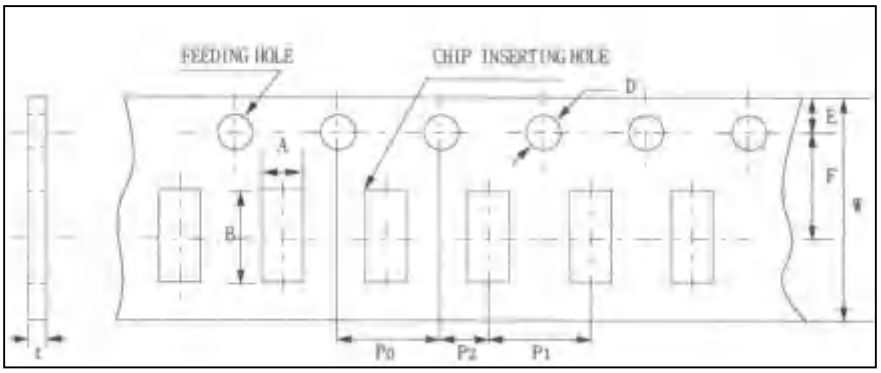
- Max Temperature: Max 380 ℃(Max 5sec)

9. Packing specification

9. 1 Taping figure



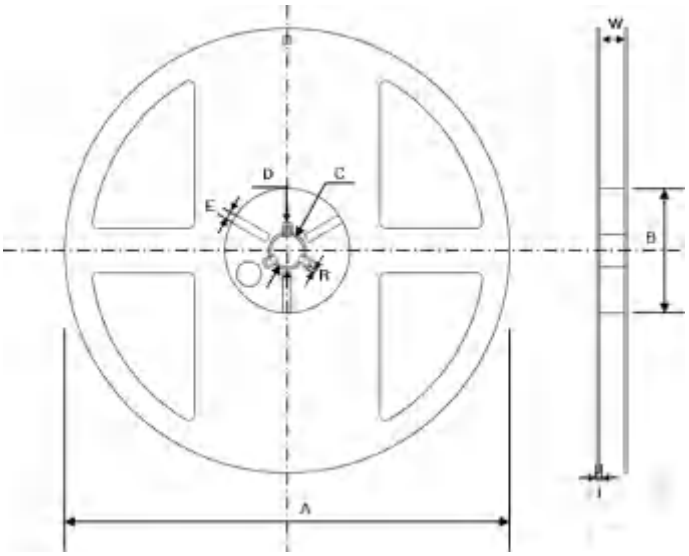
9. 2 Carrier tape dimensions



Unit : mm

SYMBOL		A	B	W	F	E	P_1	P_2	P_0	D	t
DIMENSION	11	1.15 ±0.05	1.5 ±0.05	8.0 +0.30 -0.10	3.5 ±0.05	1.75 ±0.05	4.0 ±0.10	2.0 ±0.05	4.0 ±0.10	1.55 ±0.03	0.75 ±0.05

9. 3 Reel dimensions



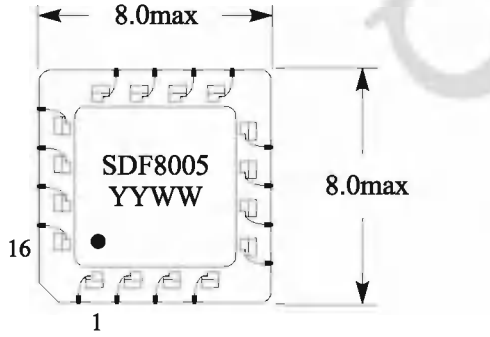
(1) Reel Materials: Polystyrene
(2) Label
(3) Taping
- Standard Packing Quantity per Reel (ϕ178)
- Paper Tape: 4,000pcs

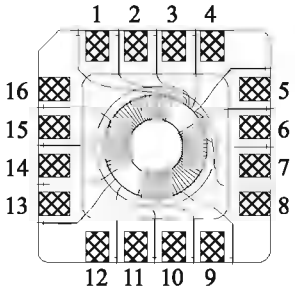
Unit : mm

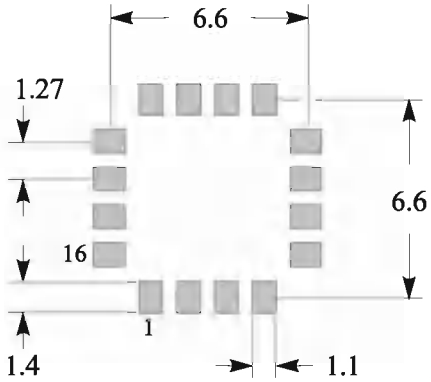
CODE	A	B	C	D	E	W	t	R
DIMENSION	ϕ178±2	Min. ϕ50	ϕ13±0.5	ϕ20±0.8	3.0±0.5	10±1.5	1.3±0.2	1.0±0.2

Rev.	Description	Date
A0	New release	2022.02.07

1.PHYSICAL CHARACTERISTICS(mm)

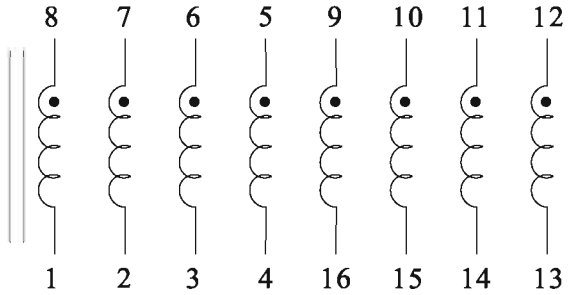






Recommended Land Pattern

2.ELECTRONICAL SCHEMATIC



3.ELECTRONICAL SPECIFICATIONS

Inductance: 5.0uH Min@1.0MHz,0.1V

RDC: 200mΩ Max

Rated current: 500mA Max

Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +85℃

Packaging: 1000PCS/13 "Reel

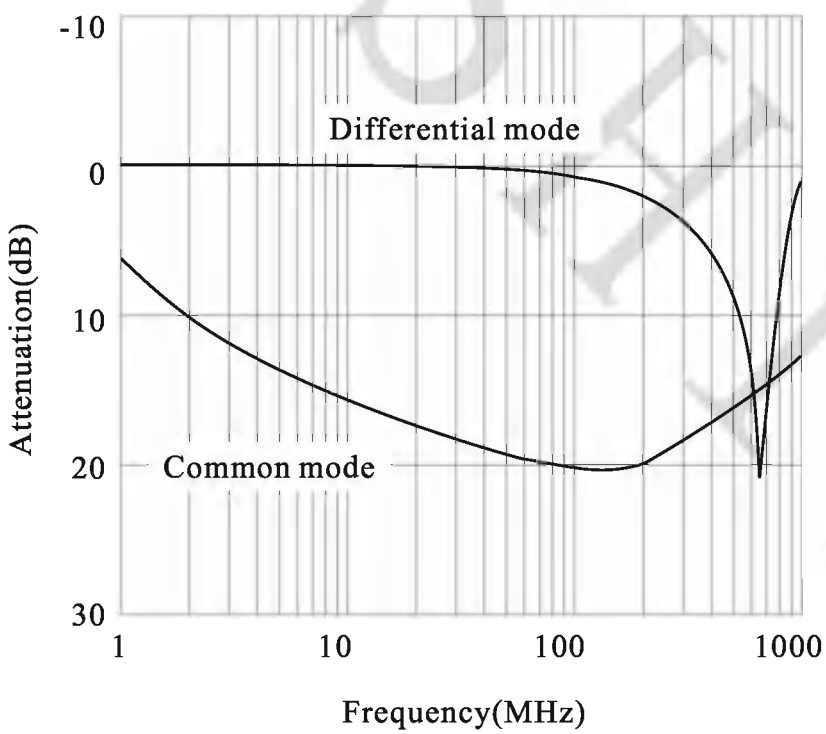
Weight: 1.2Kg/Reel

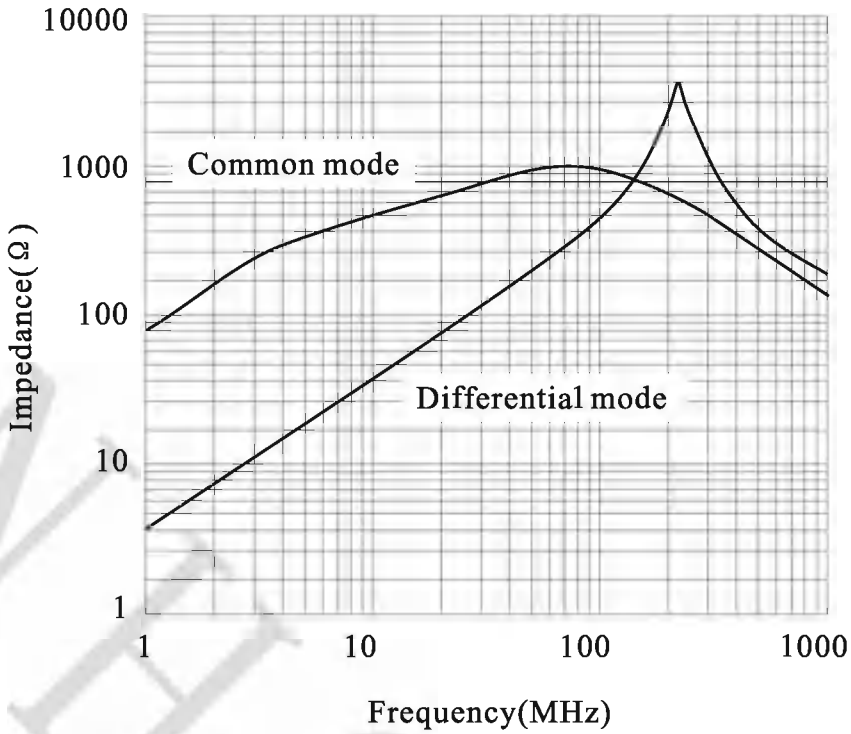
NAME:	SMT Data Line EMI Filters		
CUSTOMER P/N:	CCDLF-8500LD	DATE:	2022-02-07
SHINHOM P/N:	SDF8005	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

SHINHOM

SHINHOM

SHAANXISHINHOM ENTERPRISE CO LTD





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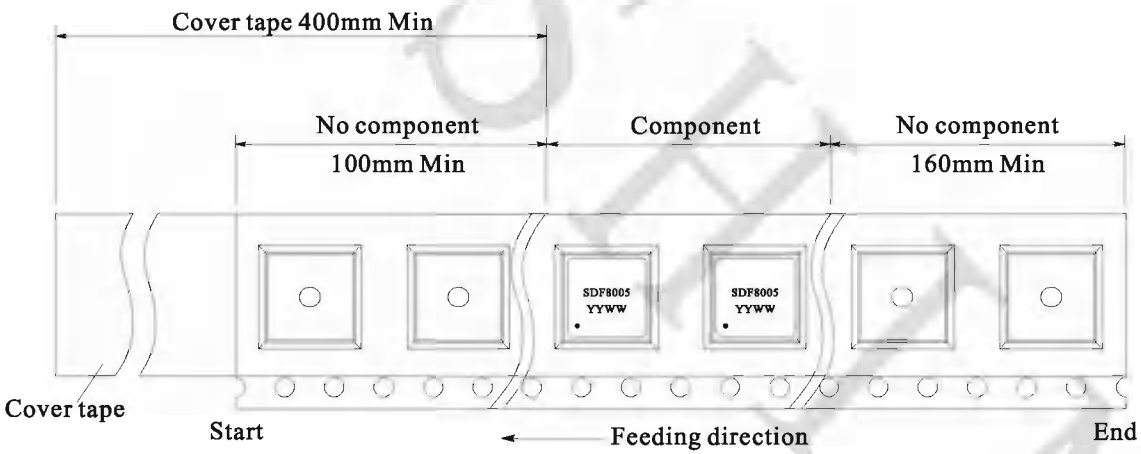
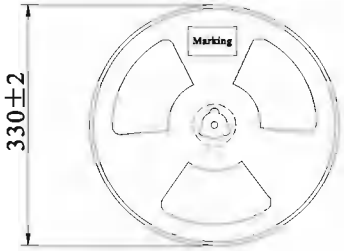
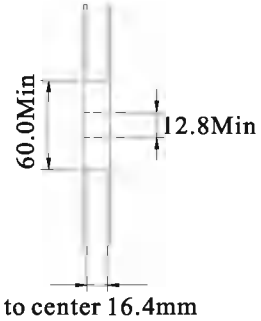
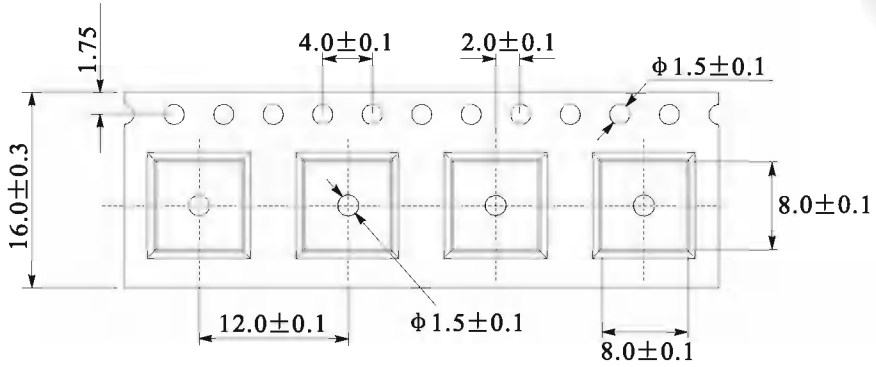
CARRIER TAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)

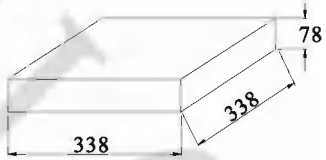




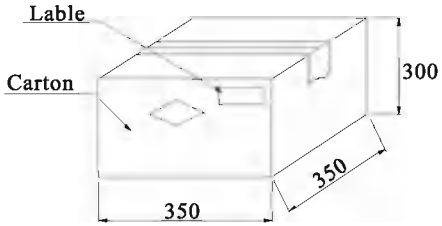


1000PCS/Reel





3 Reel / Box



3 Box / Carton

NAME:	SMT Data Line EMI Filters		
CUSTOMER P/N:	CCDLF-8500LD	DATE:	2022-02-07
SHINHOM P/N:	SDF8005	REV: A0	PAGE
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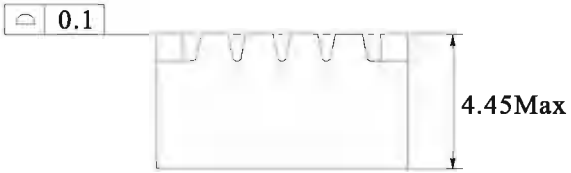
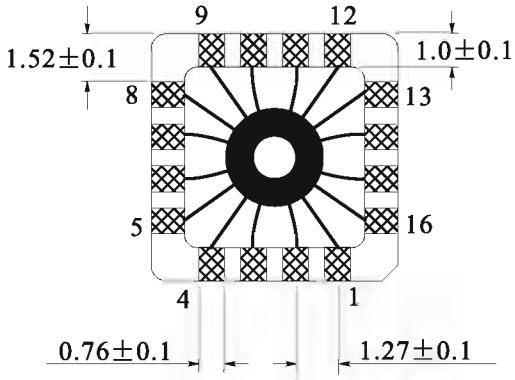
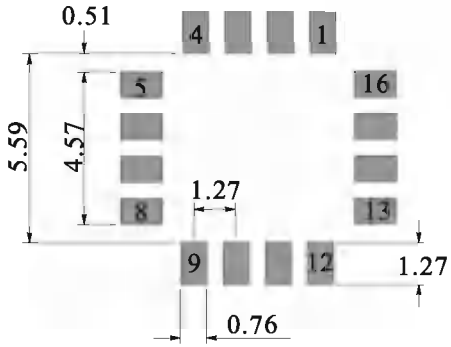
Rev.	Description	Date
A0	New release	2020.06.03

1.PHYSICAL CHARACTERISTICS(mm)

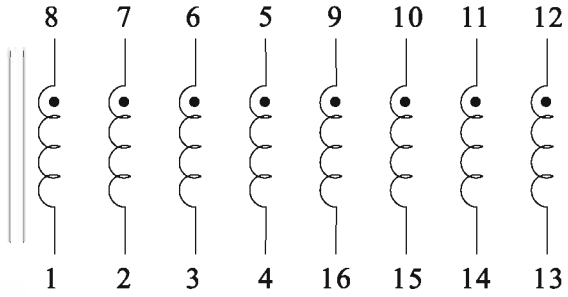




Recommended
Land Pattern



2.ELECTRONICAL SCHEMATIC



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SHINHOM P/N:	SDLF8005	REV: A0	PAGE
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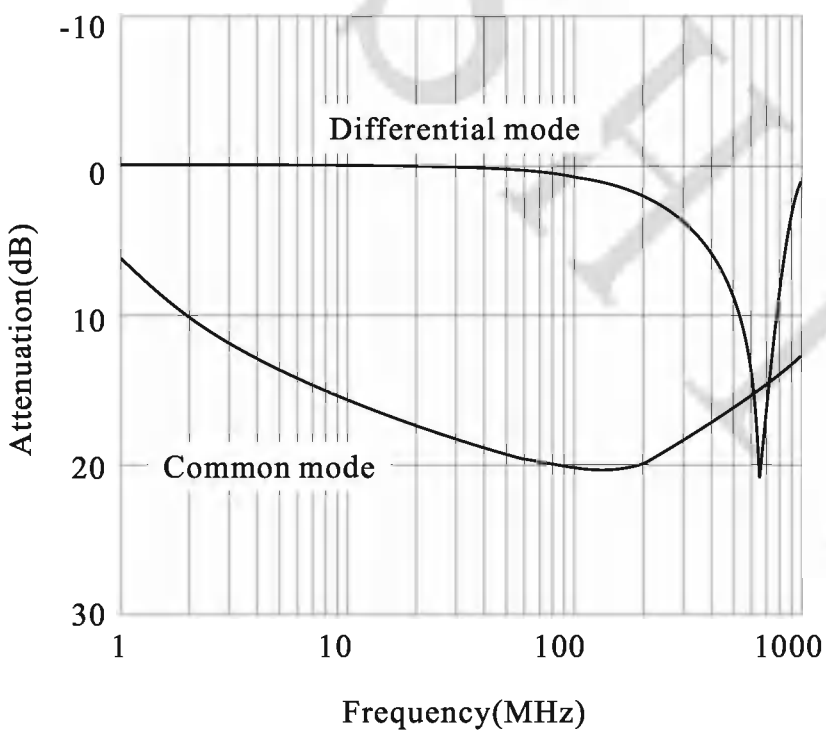

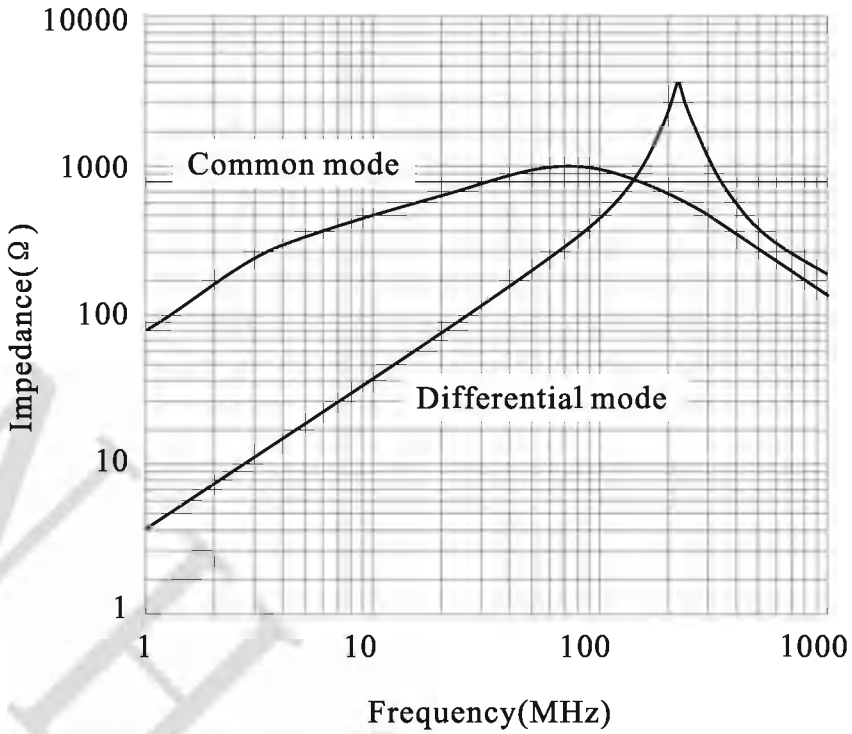

NAME:	SMT Data Line EMI Filters		
CUSTOMER P/N:	CCDLF-8500LD	DATE:	2020-06-03
SHINHOM P/N:	SDLF8005	REV: A0	PAGE
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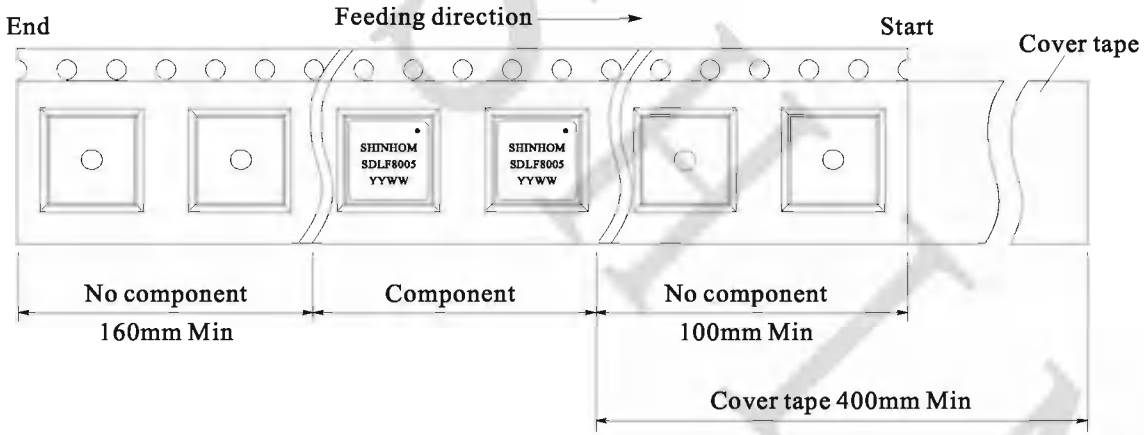
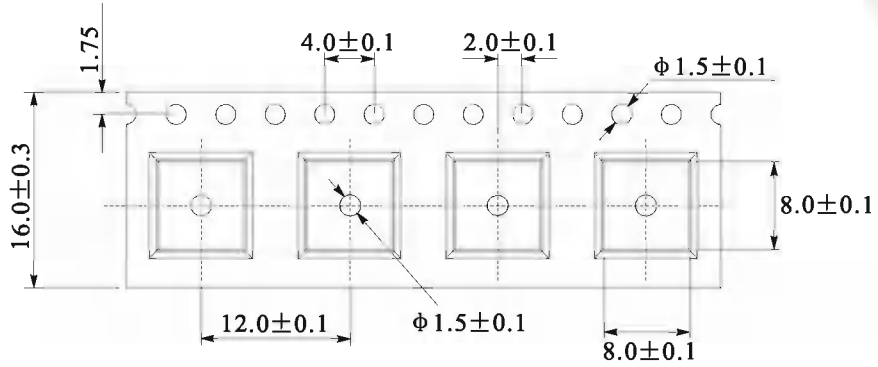
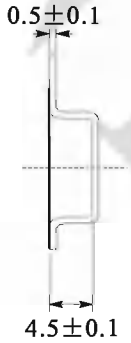
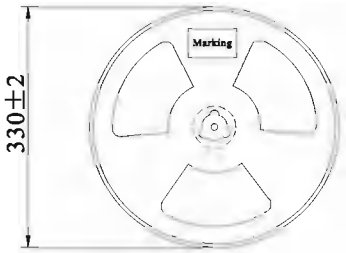
SHAANXISHINHOM ENTERPRISE CO LTD

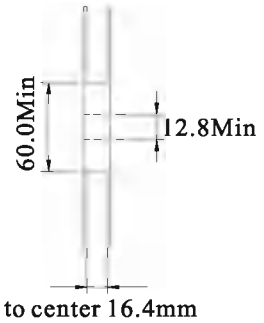
CARRIER TAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)



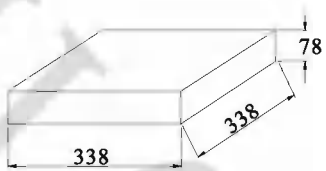




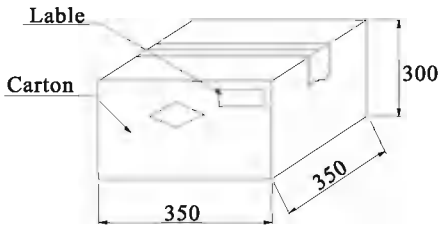




1000PCS/Reel



3 Reel / Box



3 Box / Carton

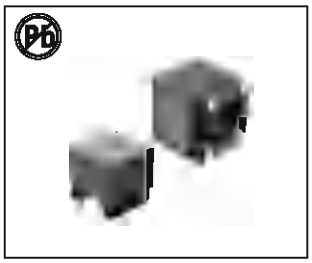
NAME:	SMT Data Line EMI Filters		
CUSTOMER P/N:	CCDLF-8500LD	DATE:	2020-06-03
SHINHOM P/N:	SDLF8005	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

SHINHOM

SHINHOM SHAANXISHINHOM ENTERPRISE CO LTD

SMT COMMON MODE CHOKES

AEP18 SERIES



FEATURES:

- EP18 Platforms
- 19.5x19.8x19.2mm
- 154uH/21A to 400uH/14A
- 1000Vrms Isolation (380Vrms continuous)

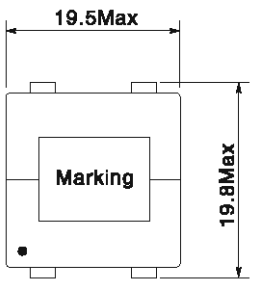
ELECTRICAL CHARACTERISTICS@25℃

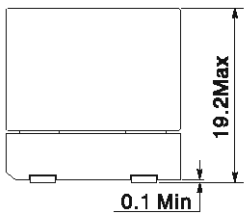
Part Number	Inductance (uH) ±40% 1–2=4–3	Rated current (A)	LK (uH) Typ 1–2(Short 4,3)	Capacitance (pF) Typ. 1–4	SRF (MHz)Typ	Impedance @SRF (KΩ)Typ	DCR (mΩ)Max
AEP18–151Y–21A	154.0	21	0.7	5.0	3.3	0.82	2.2
AEP18–221Y–20A	220.0	20	1.0	6.1	3.66	1.09	2.6
AEP18–301Y–17A	305.0	17	1.5	7.2	3.0	1.57	3.85
AEP18–401Y–14A	400.0	14	2.0	8.2	2.84	1.67	5.5

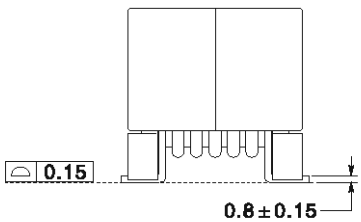
Note:

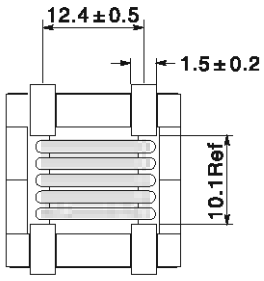
- Inductance test at 10KHz,0.1V
- The current rating (Irated) is based upon the temperature rise of the component and represents the rms current which will cause a typical temperature rise of 60℃ with free air cooling
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- Operating temperature range –40℃ to +125℃

TECHNICAL INFORMATION & WINDING

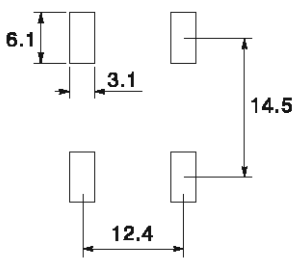




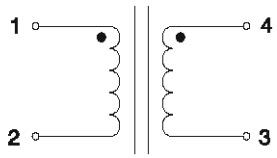




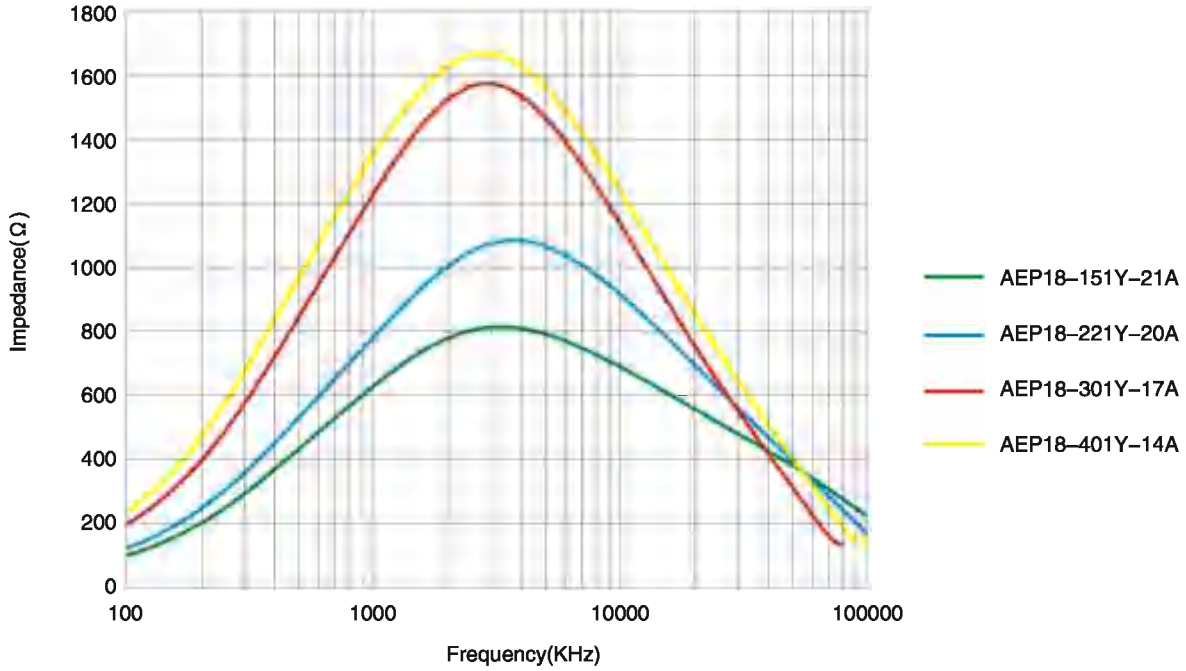
Suggest layout



Winding

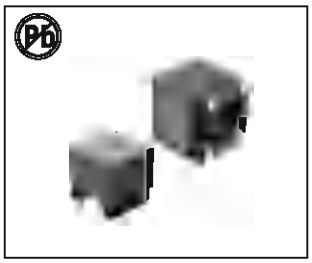


Tape & Reel: 70PCS/Reel


1800
1600
1400
1200
1000
800
600
400
200
0
Impedance(Ω)
100
1000
10000
100000
Frequency(KHz)
AEP18–151Y–21A
AEP18–221Y–20A
AEP18–301Y–17A
AEP18–401Y–14A

SMT COMMON MODE CHOKES

AEP22 SERIES



FEATURES:

- EP22 Platforms
- 23.5x24.3x22.7mm
- 110uH/32A to 470uH/18A
- 1000Vrms Isolation (380Vrms continuous)

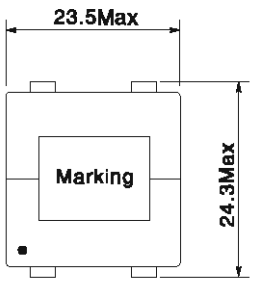
ELECTRICAL CHARACTERISTICS@25℃

Part Number	Inductance (uH) ±40% 1–2=4–3	Rated current (A)	LK (uH) Typ 1–2(Short 4,3)	Capacitance (pF) Typ. 1–4	SRF (MHz)Typ	Impedance @SRF (KΩ)Typ	DCR (mΩ)Max
AEP22–111Y–32A	110	32	0.7	6.5	2.82	0.5	1.1
AEP22–191Y–30A	190	30	0.9	8	3.35	0.7	1.35
AEP22–261Y–26A	260	26	1.3	5.3	2.82	1.05	2.1
AEP22–361Y–22A	360	22	1.8	6	2.1	1.55	2.9
AEP22–471Y–18A	470	18	2.0	5.7	1.96	1.95	4.2

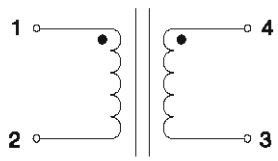
Note:

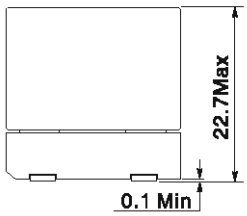
- Inductance test at 10KHz,0.1V
- The current rating (Irated) is based upon the temperature rise of the component and represents the rms current which will cause a typical temperature rise of 60℃ with free air cooling
- The temperature of the component (ambient plua temperature rise) must be within the stated operating temperature range.
- Operating temperature range –40℃ to +125℃

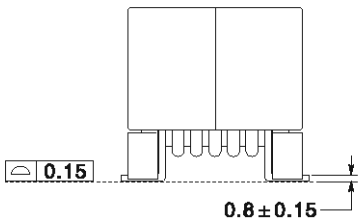
TECHNICAL INFORMATION & WINDING

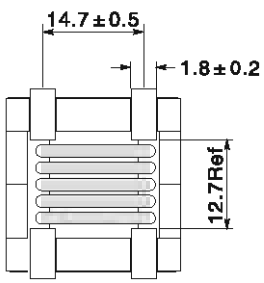


Winding

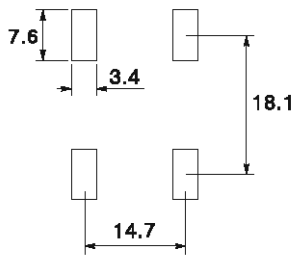




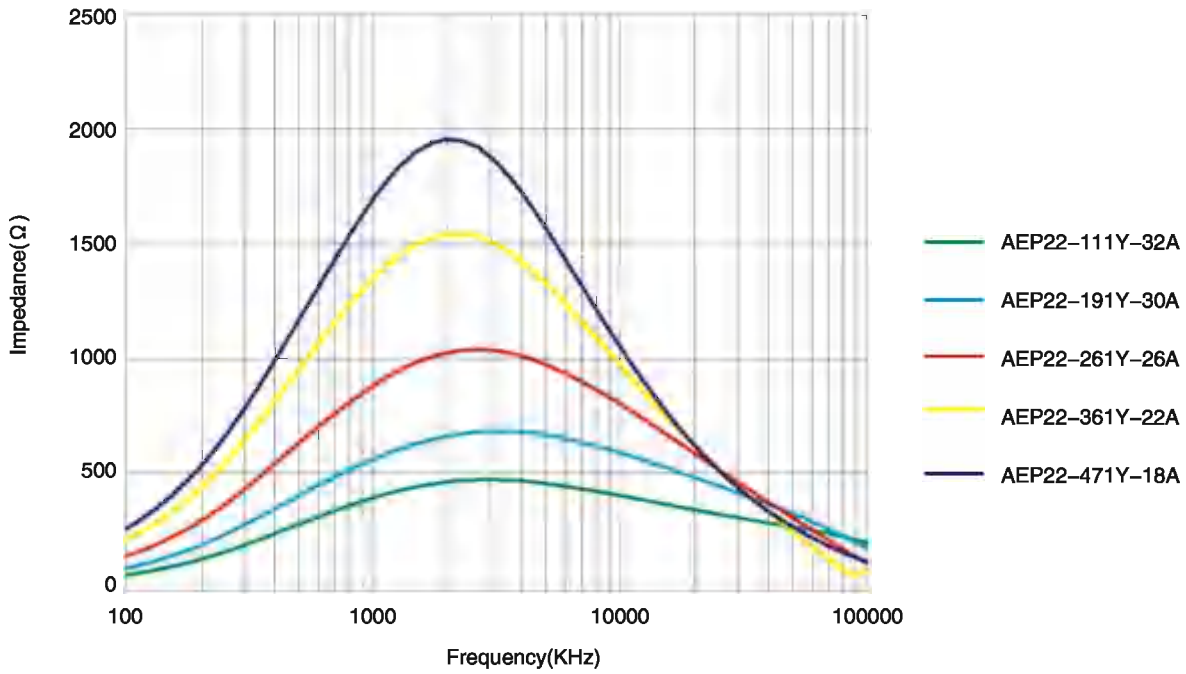




Suggest layout



Tape & Reel: 45PCS/Reel


2500
2000
1500
1000
500
0
Impedance(Ω)
100
1000
10000
100000
Frequency(KHz)
AEP22-111Y-32A
AEP22-191Y-30A
AEP22-261Y-26A
AEP22-361Y-22A
AEP22-471Y-18A

SMD Line Filter

LQH2010D SERIES

FEATURES:

- Current rating up to 6 A
- Impedance range: 100 to 1400MHz
- RoHS compliant

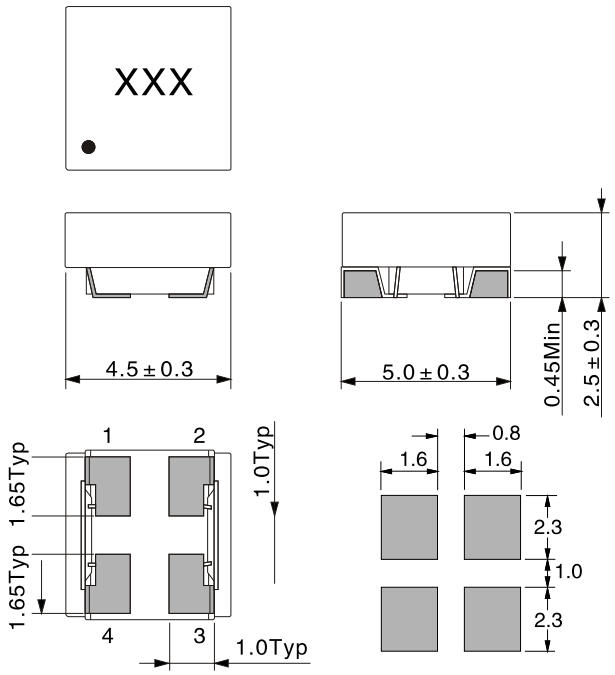
APPLICANTIONS:

- EMI suppression
- Power line equipment
- Portable equipment

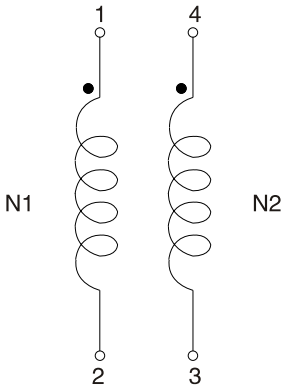
ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (uH)Ref	Impedance Z(Ω) Typ 100MHz	Rated current (mA)	DCR (mΩ).	Rated voltage (Vdc)
LQH2010D–101Y	0.4	100	6000	9 ± 40%	50
LQH2010D–251Y	0.8	250	5000	14 ± 40%	50
LQH2010D–501Y	1.5	500	4000	19 ± 40%	50
LQH2010D–102Y	2.7	1000	2000	24 ± 40%	50
LQH2010D–142Y	3.5	1400	1500	40 ± 40%	50

PHYSICAL CHARACTERISTICS:



WINDING:



GENERAL SPECIFICATIONS:

Dielectric Withstanding Voltage: 125 Vdc
Insulation resistance: 10M Ω Min
Temperature Rise: 20 ℃ at rated current
Operating Temperature: –40 ℃ to +125 ℃ (Temperature rise included)
Storage Temperature: –40 ℃ to +125 ℃
Solderability: 250 ℃ for 5 sec.

Note:All specifications subject to change without notice.

SMD Line Filter

LQH2020D SERIES

FEATURES:

- Current rating up to 5 A
- Inductance range: 0.60 to 6.0 uH
- Frequency range to 1200 MHz
- RoHS compliant

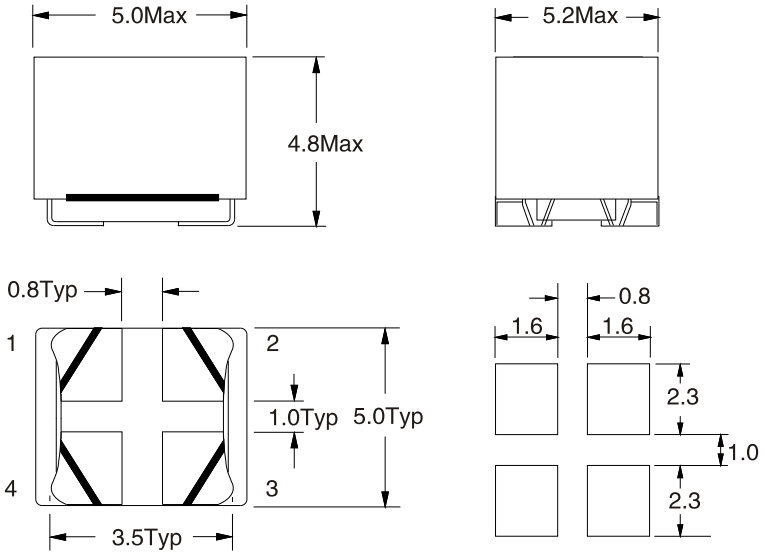
APPLICANTIONS:

- EMI suppression

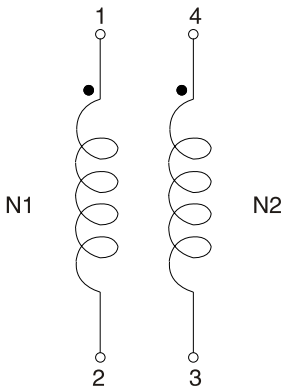
ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (uH)ref 100KHz,0.1V	Impedance Z(Ω) 100MHz	DCR Max. (mΩ).	Rated current (mA)
LQH2020D–191Y	0.6	190 ± 35%	20	5000
LQH2020D–351Y	1.1	350 ± 35%	40	2000
LQH2020D–102Y	2.7	1000 ± 35%	60	1500
LQH2020D–152Y	3.6	1500 ± 35%	100	1000
LQH2020D–302Y	6.0	3000 ± 35%	200	500
LQH2020D–402Y	2.8	4000 ± 35%	300	200

PHYSICAL CHARACTERISTICS:



WINDING:



GENERAL SPECIFICATIONS:

Rated Voltage : 50 Vdc
Dielectric Withstanding Voltage: 125 Vdc
Temperature Rise: 20 ℃ at rated current
Operating Temperature: -40 ℃ to +125 ℃ (Temperature rise included)
Storage Temperature: -40 ℃ to +125 ℃
Solderability: 250 ℃ for 5 sec.

Note:All specifications subject to change without notice.