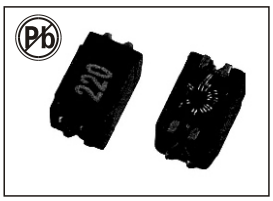


EMI LINE FILTER

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

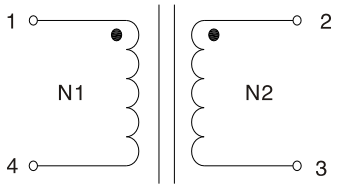
COMMON APPLICATIONS:

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

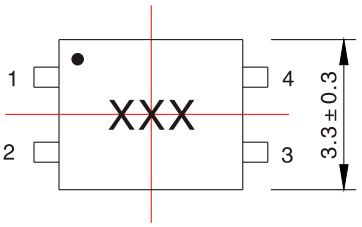
ELECTRICAL CHARACTERISTICS:@25℃

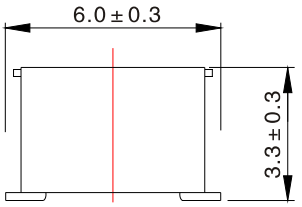
Part Number	L(0A) (uH)+50%/–30% 10KHz,0.1V	Frequency Range(MHz)	Impedance Z(Ω)Min	DCR(mΩ)Max each winding	Rated current (mA)
SF0503–110Y	11	100–400	450	180	100
SF0503–220Y	22	40–250	900	230	100
SF0503–330Y	33	30–180	1000	270	100
SF0503–500Y	50	20–60	1200	320	100
SF0503–101Y	100	10–50	1400	450	100

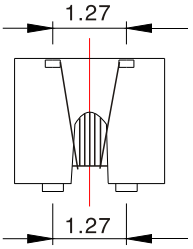
SCHEMATIC



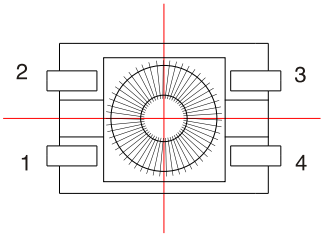
PHYSICAL CHARACTERISTICS

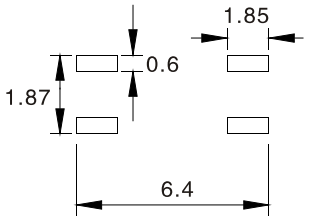




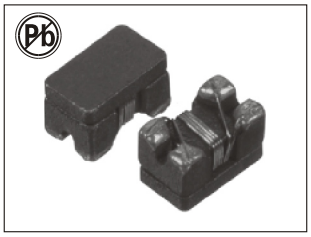


NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   –40℃ to +125℃(Temperature rise included)
4. Storage Temperature:
   –40 ℃ to +125℃
   Solderability: 245℃ for 5 sec
5. Core Material .....Ferrite
6. Wire .....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.

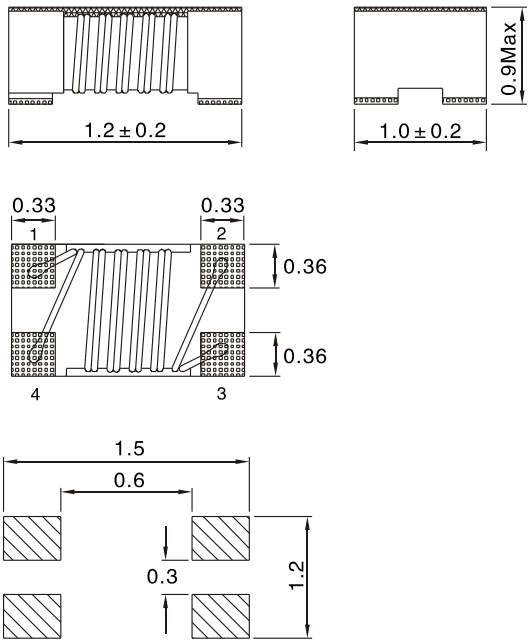
APPLCATIONS:

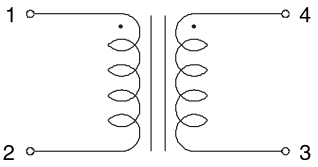
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

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

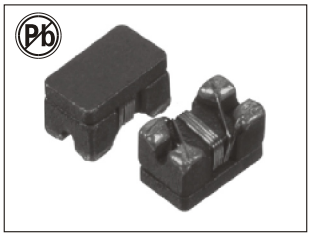
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- 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.

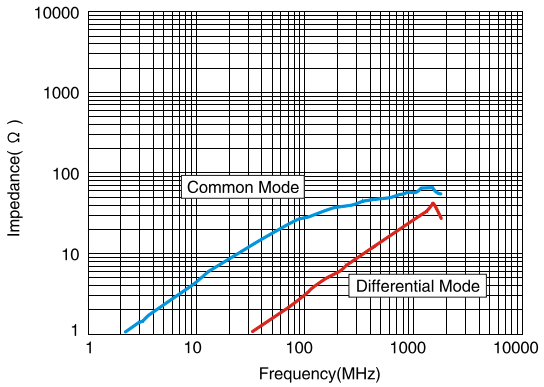


SMD WIRE WOUND COMMON MODE FILTER

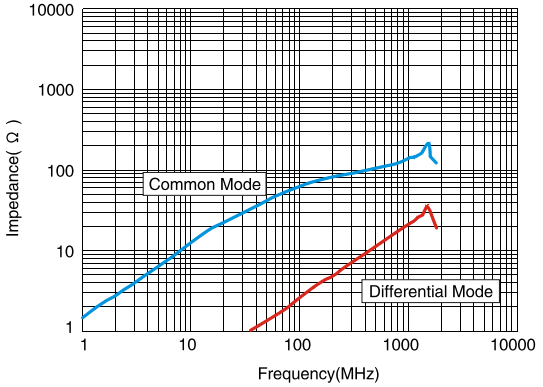
SF0504 SERIES

IMPEDANCE FREQUENCY:

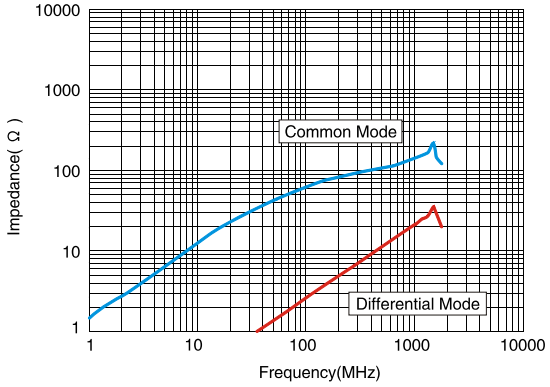
SF0504-250



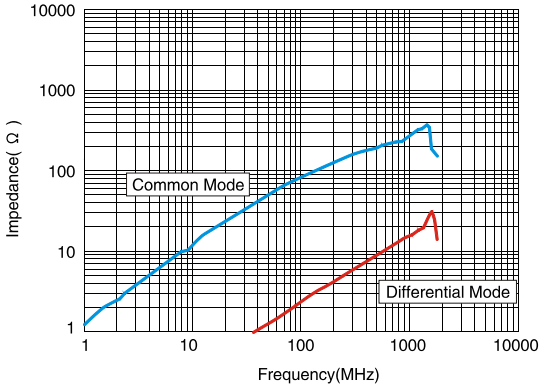
SF0504-600



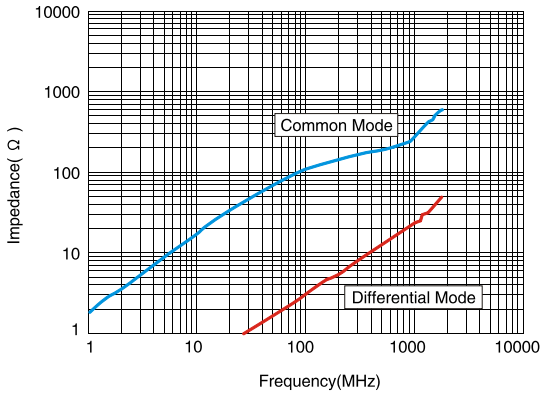
SF0504-670



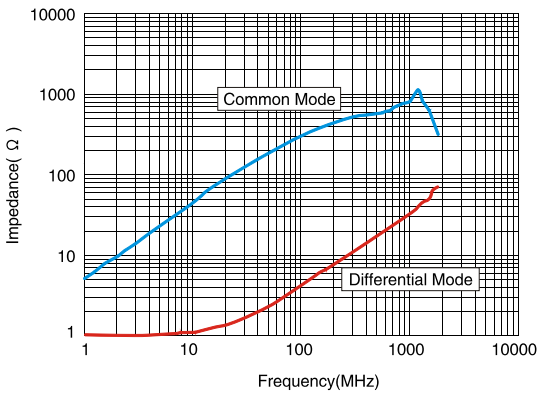
SF0504-900

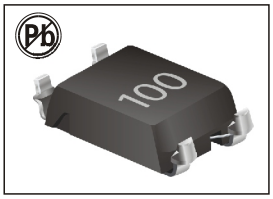


SF0504-121



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

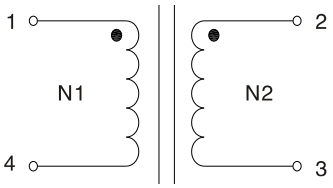
COMMON APPLICATIONS:

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

ELECTRICAL CHARACTERISTICS:@25℃

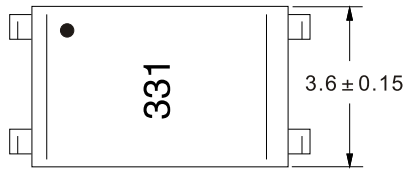
Part Number	L (μH) 10KHz,2mV	Lk (μH) Max 10KHz,2mV	DCR(mΩ)Max each winding	Rated current (mA)	Impedance(Z)	
					Frequency Range (MHz)	Min value (Ω)
SF0602–100Y	10 ± 50%	1	240	300	35–570	600
SF0602–470Y	47 ± 50%	4	160	300	4–1600	140
SF0602–820Y	82 ± 50%	4	200	300	3–850	220
SF0602–101Y	100 ± 50%	8	220	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

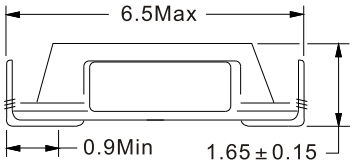
SCHEMATIC

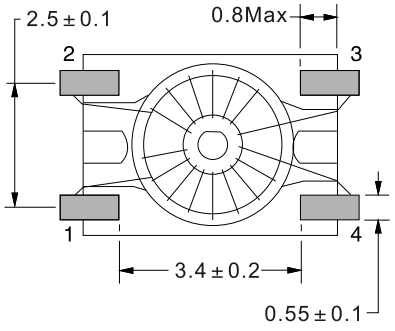


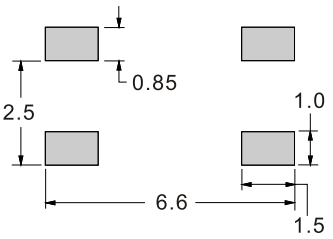
NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   −40℃ to +105℃(Temperature rise included)
4. Storage Temperature:
   −40 ℃ to +105℃
   Solderability: 260℃ for 5 sec
5. Core Material .....Ferrite
6. Wire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

PHYSICAL CHARACTERISTICS

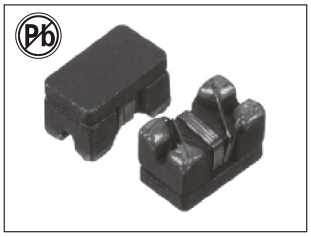








Note:All specifications subject to change without notice.



SMD WIRE WOUND COMMON MODE FILTER

SF0805 SERIES

FEATURES:

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

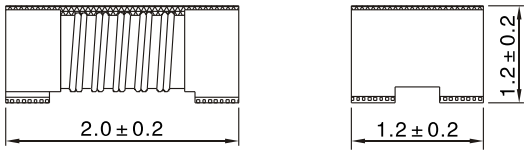
APPLCATIONS:

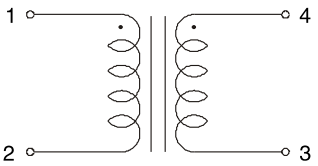
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

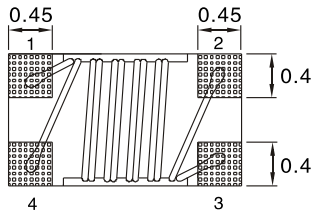
ELECTRICAL CHARACTERISTICS:

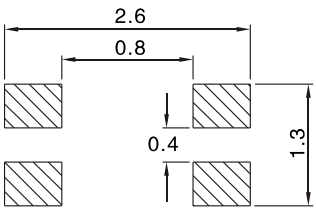
Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (mA) Max	Rated Voltage (V)	Insulation resistance (Min)
SF0805–240	24	100	0.25	420	50	10MΩ
SF0805–250	25	100	0.25	420	50	10MΩ
SF0805–320	32	100	0.25	400	50	10MΩ
SF0805–600	60	100	0.30	300	50	10MΩ
SF0805–670	67	100	0.30	400	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:



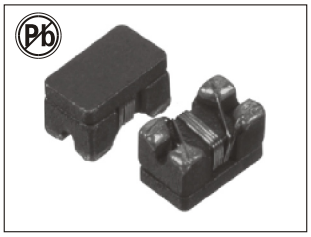






- Impedance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

Note:All specifications subject to change without notice.

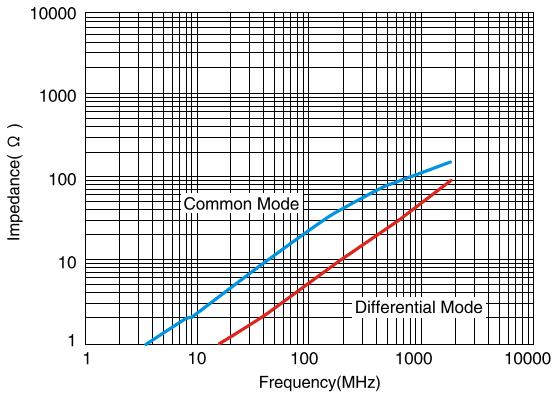


SMD WIRE WOUND COMMON MODE FILTER

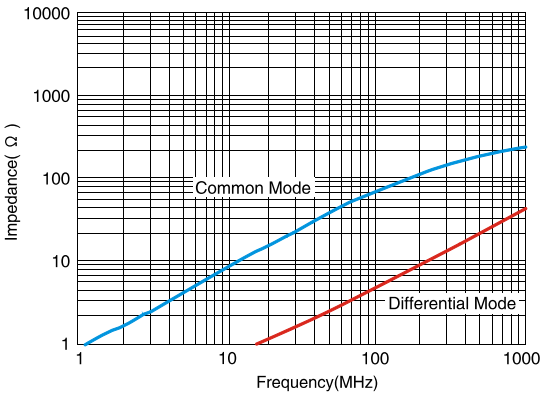
SF0805 SERIES

IMPEDANCE FREQUENCY:

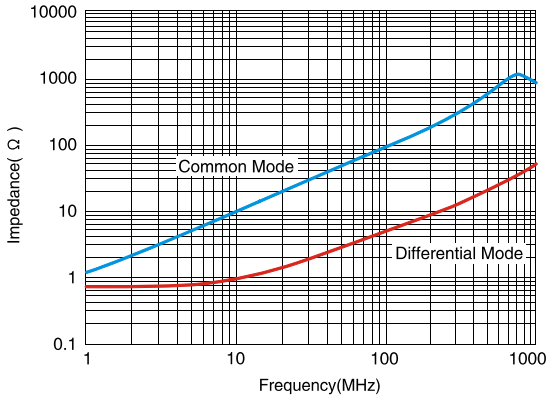
SF0805-240



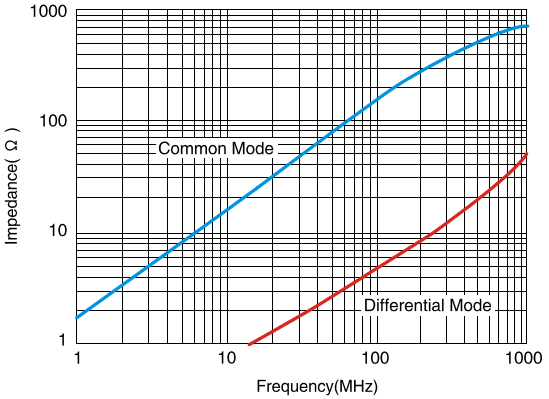
SF0805-600



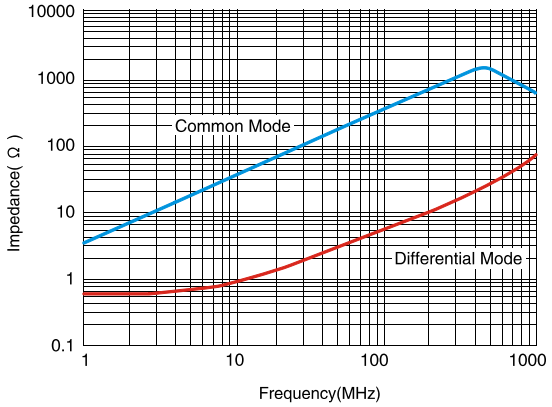
SF0805-900

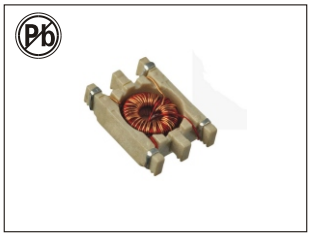


SF0805-161



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

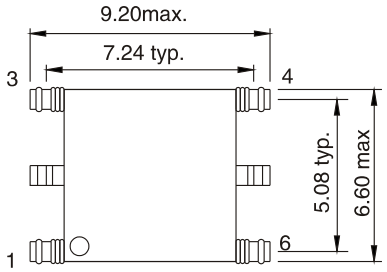
COMMON APPLCATIONS:

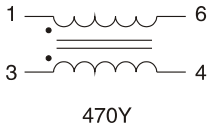
- Provide common mode noise attenuation
- Reduce conducted noise
- For the suppression of EMI in data lines and signal lines,e.g.,CAN Bus

ELECTRICAL CHARACTERISTICS:

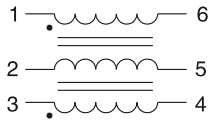
Part Number	L(μH) 100K/0.1V	L–L(μH) 100K/0.02V	C(pF) 100K/0.02V	DCR(Ω) max.	Tums Ratio	Insertion Loss		Impedance(z)	
SF0903						Freq.rang	db	Freq.rang	min(Ω)
470YAB	47.0 min.	0.18^{+0}	20^{+0}	0.4	1:1	1~100MHz	20^{-0}	10~30MHz	1000
200YAB	20.0 min.	0.10^{+0}	18^{+0}	0.4	1:1:1	30~300MHz	20^{-0}	30~100MHz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

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

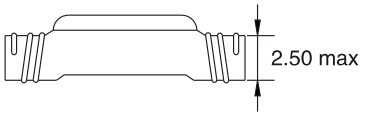


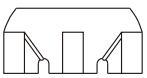


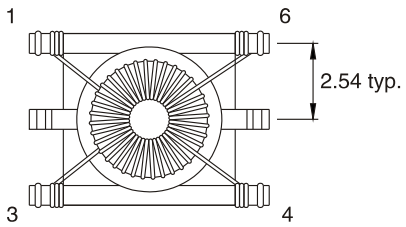
470Y

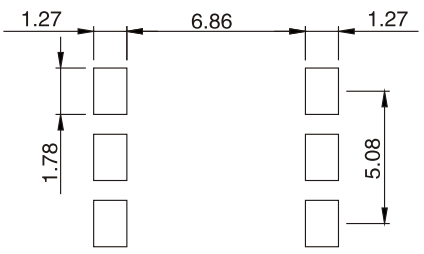


200Y





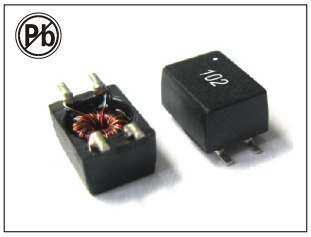




PCB layout

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

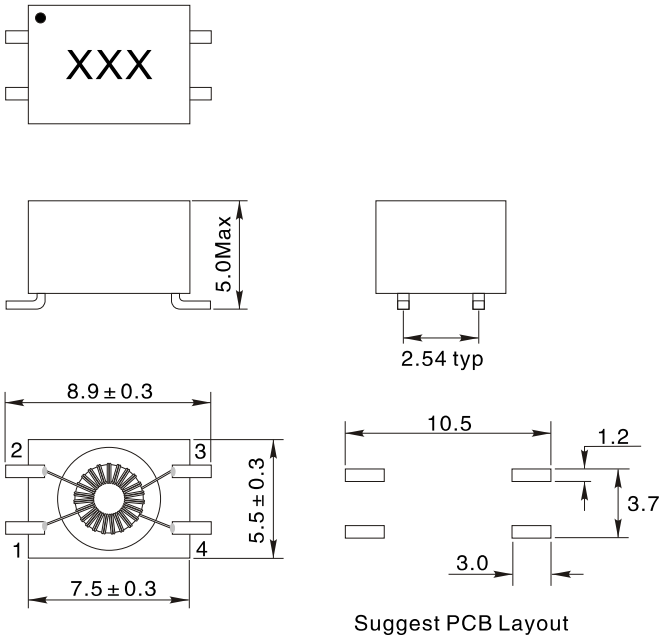
COMMON APPLCATIONS:

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

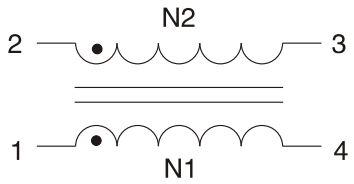
ELECTRICAL CHARACTERISTICS:

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

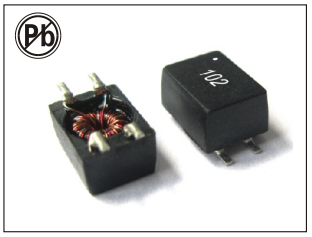


- Materials:
  1. Core: Ferrite Toroidal Core
  2. Wire: Enamelled Copper Wire(Class F)
  3. Case: PPHS (UL940V–0)
  4. Terminal: Cu / Ni / Sn
  5. Adhesive: Epoxy Resin
- General Specification:
  1. Storage Temperature: – 40℃ – + 125℃
  2. Operation Temperature: – 40℃ – + 85℃
  3. Temperature Rise Included: 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:

- Date and signal line

OPTIONS:

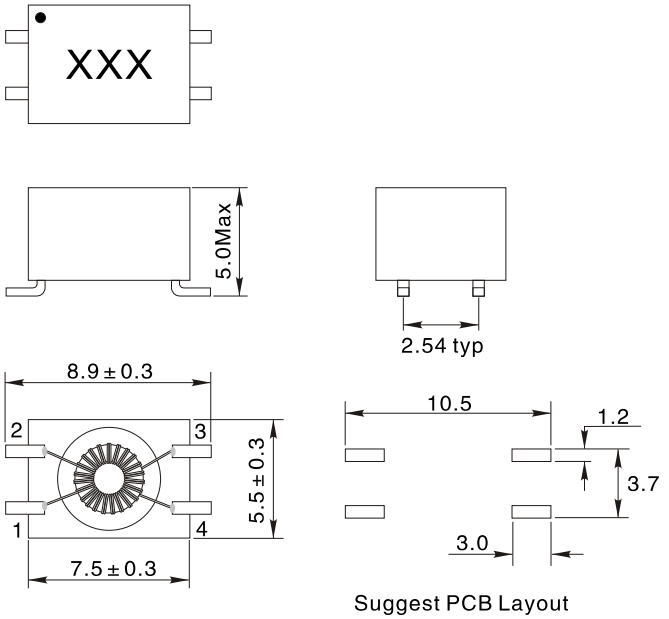
- Tape & Reel is Standard

ELECTRICAL CHARACTERISTICS:

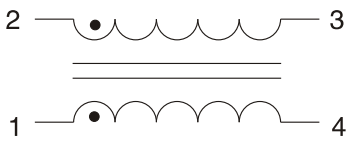
Part Number	Inductance (uH)	LK(nH) Typ.	DCR (Ω) max.	Rated Current (mA)max.	Vtest (Vdc/2S)	Operating temperature range(℃)
SF0904A–5R0N	5 ± 30%	40@1MHz	0.06	1200	250	–50 ~ +150
SF0904A–110N	11 ± 30%	50@1MHz	0.08	800	250	–50 ~ +150
SF0904A–250N	25 ± 30%	60@100KHz	0.11	800	250	–50 ~ +150
SF0904A–250NS	25 ± 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:

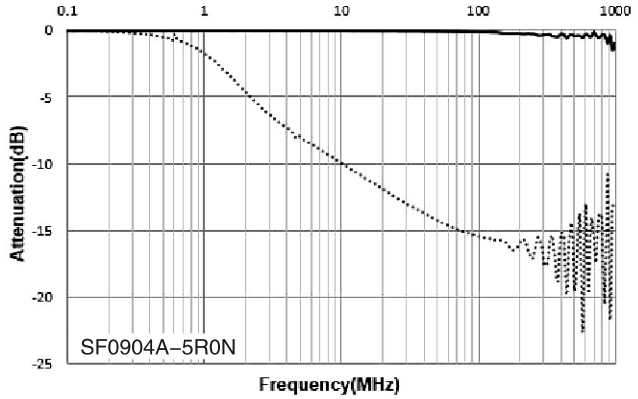


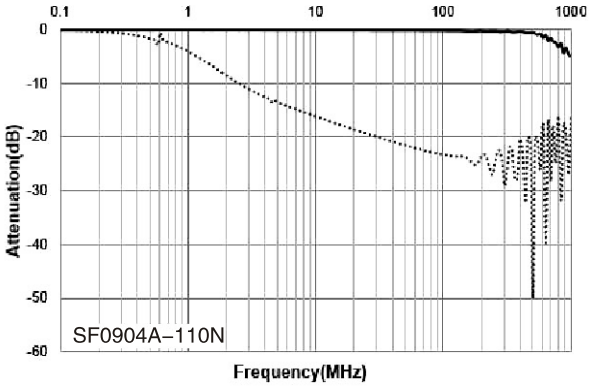
Suggest PCB Layout

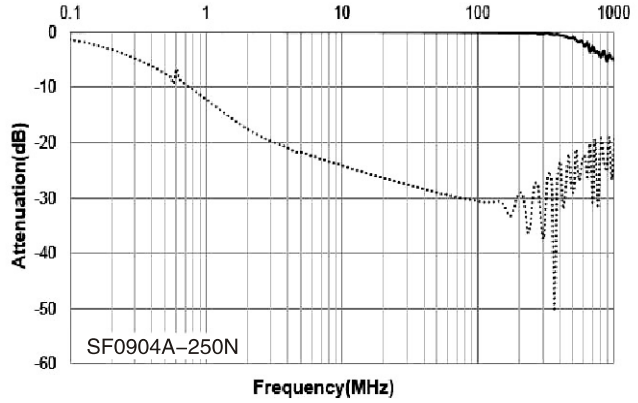


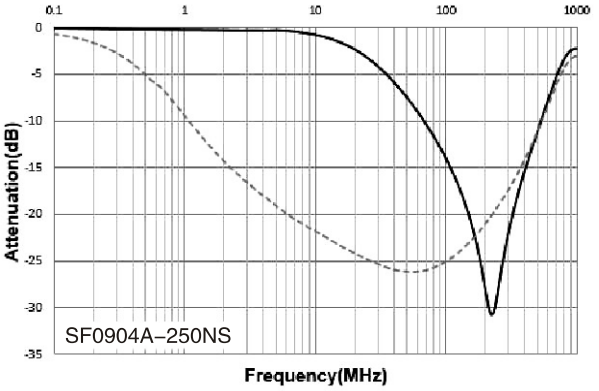
Note:
All specifications subject to change without notice.

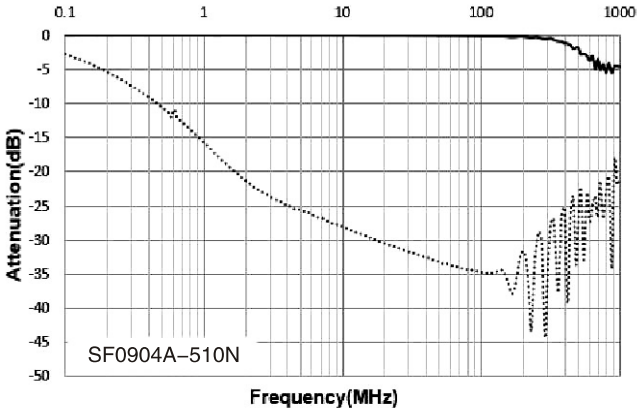
TYPICAL ELECTRICAL CHARACTERISTICS

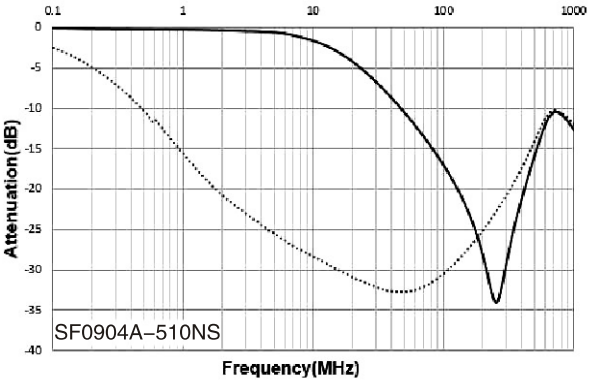


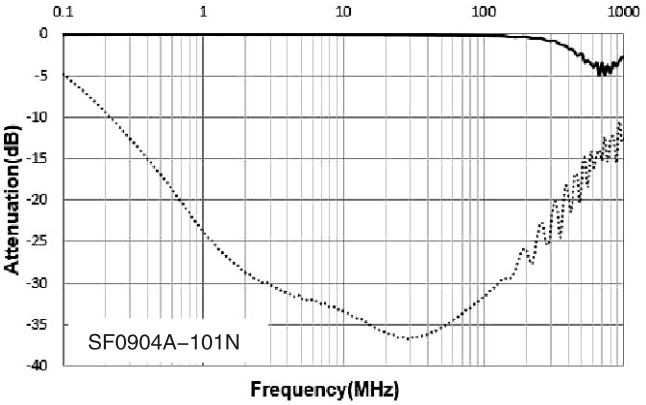


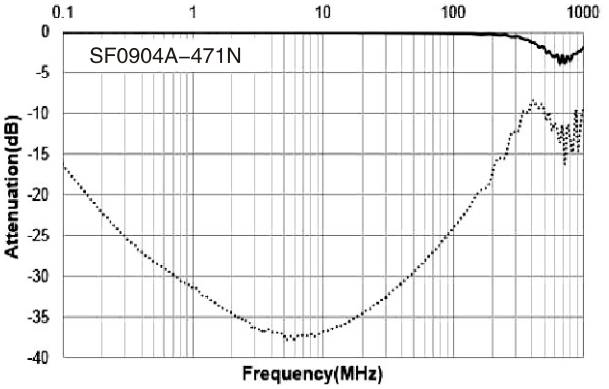




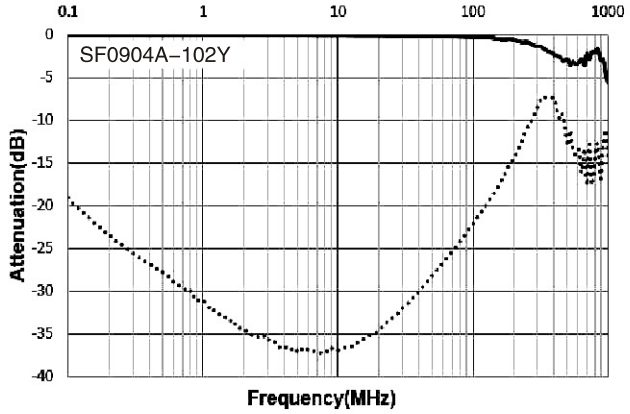


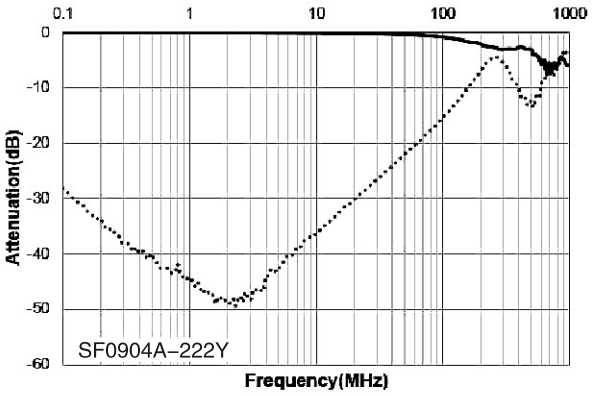


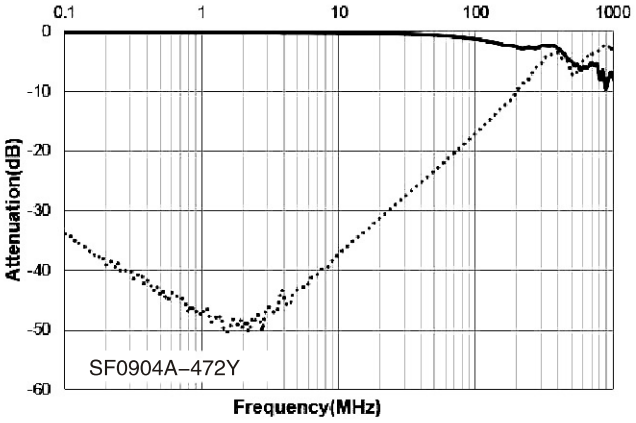


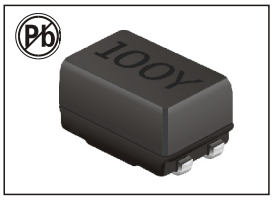


TYPICAL ELECTRICAL CHARACTERISTICS









LINE FILTER

SF0905 SERIES

FEATURES:

- Current rating up to 1.6A
- Inductance range: 10 to 6500uH
- Frequency range to 300 MHz
- RoHS compliant

OPTIONS:

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

COMMON APPLICATIONS:

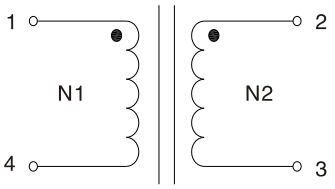
- DC–DC Conversion
- Isolation /Coupling
- Input filter
- Against CMC noise at composite
- EMI suppression

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	600
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
SF0905–652Y	6500 ± 50%	390	1050	0.3	0.3–2	5000

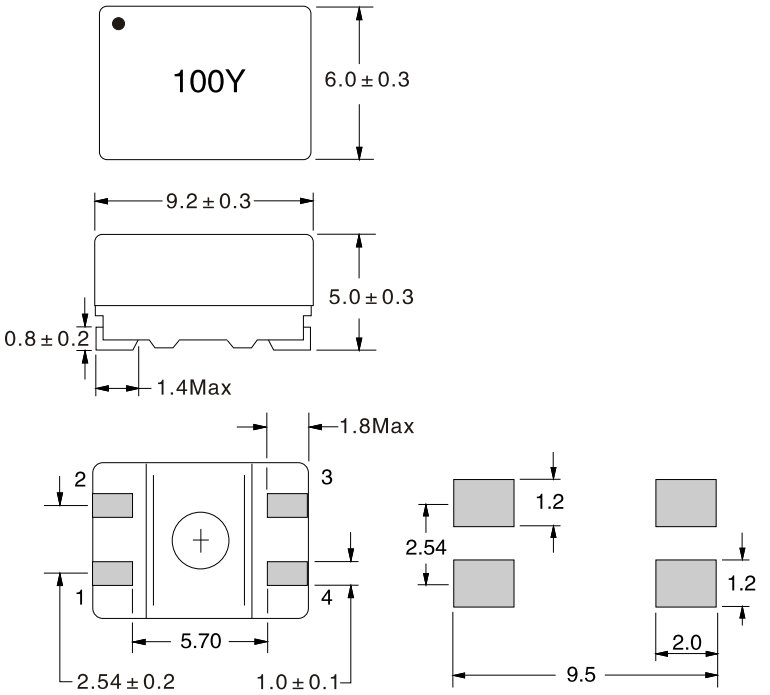
Test condition: 10–50uH: 1KHz,0.1V; 250–6500uH: 100KHz,5mV

SCHEMATIC

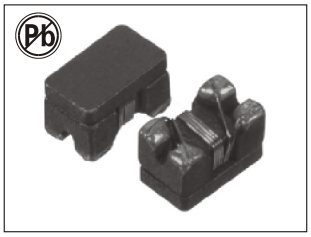


NOTES:
1. Temperature Rise: 20℃ at rated current
2. Rated Voltage: 50 Vdc
   Dielectric Withstanding Voltage: 125 Vdc
3. Operating Temperature:
   −40℃ to +105℃(Temperature rise included)
4. Storage Temperature:
   −40 ℃ to +105℃
   Solderability: 260℃ for 5 sec
5. Core Material .....Ferrite
6. Wire .....Enameled 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.

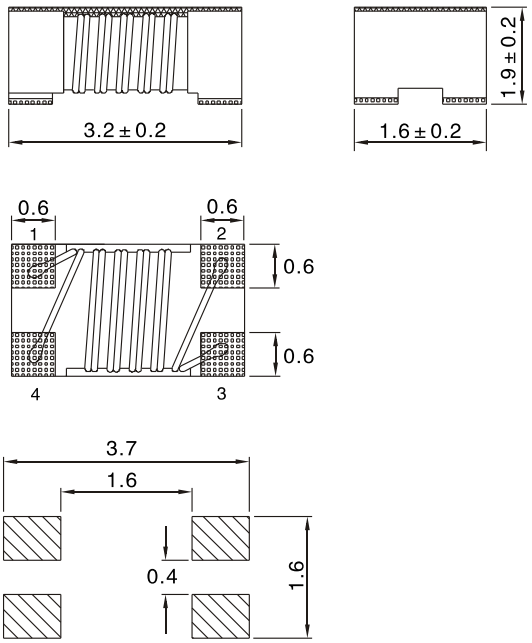
APPLCATIONS:

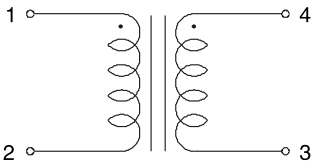
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

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

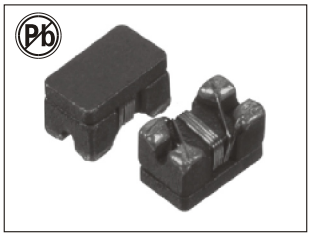
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- 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.

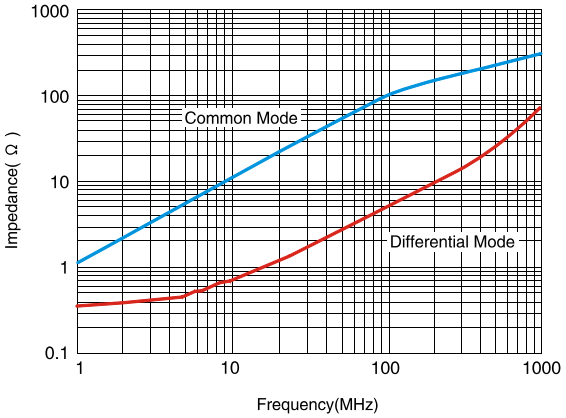


SMD WIRE WOUND COMMON MODE FILTER

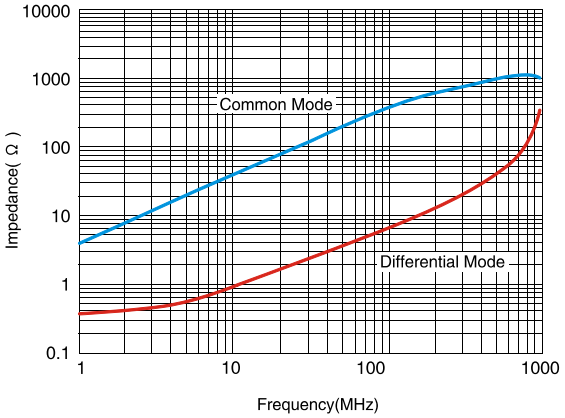
SF1206 SERIES

IMPEDANCE FREQUENCY:

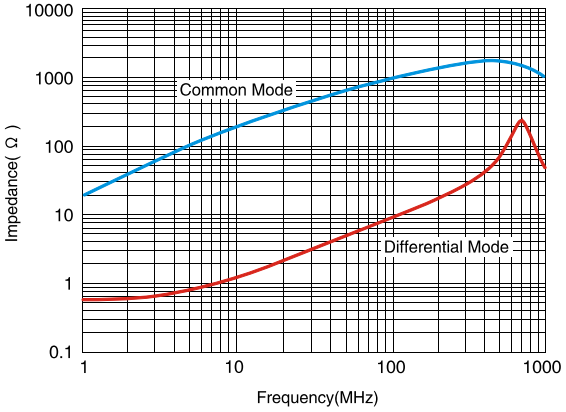
SF1206-101

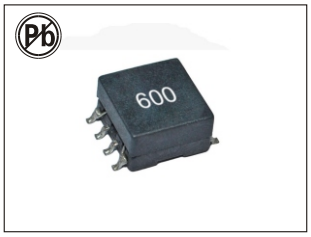


SF1206-371



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

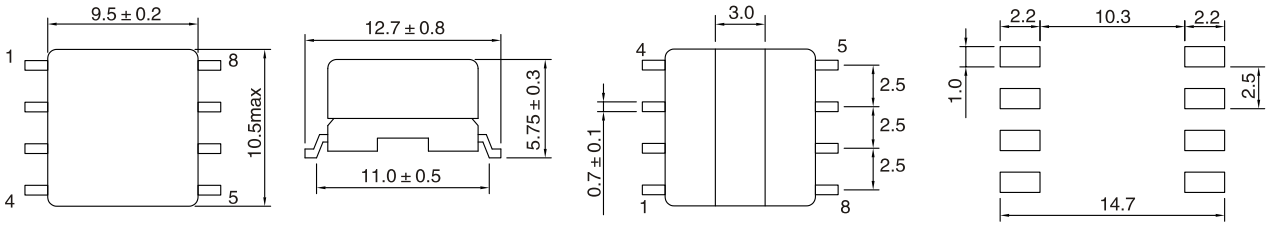
COMMON APPLCATIONS:

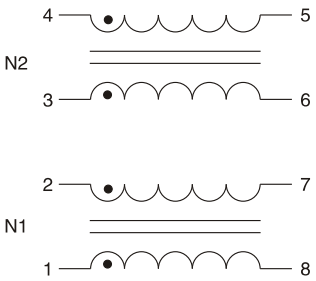
- Provide common mode noise attenuation
- Reduce conducted noise
- For the suppression of EMI in data lines and signal lines,e.g.,CAN Bus

ELECTRICAL CHARACTERISTICS:

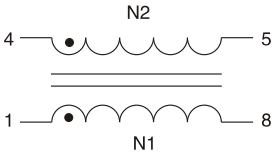
Part Number	Inductance (μ H)		DC resistance N1,N2(Ω)	Rated Current (A)	Impedance (Ω)	Freq. rang (MHz)	Fig
SF1306	L1,L2	L1–L2					
350YA	35 ± 35%	4 max.	0.035 max	2.70max	400 min	5.0~250	B
600YA	60 ± 35%	5 max.	0.065max	2.00max	600min	5.0~100	B
101YA	100 ± 35%	15 max.	0.100max	0.70max	300min	1.0~50	A
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:





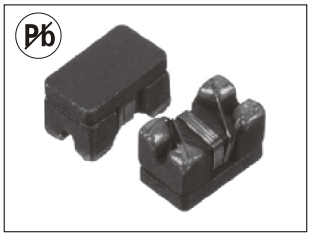
FigA



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.

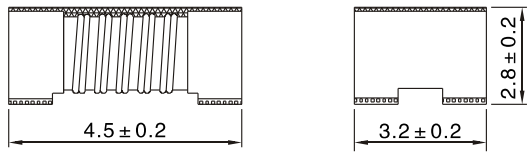
APPLCATIONS:

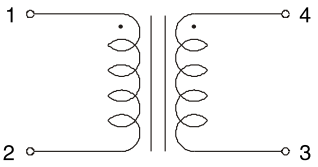
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

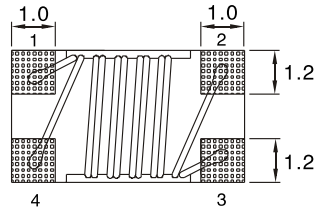
ELECTRICAL CHARACTERISTICS:

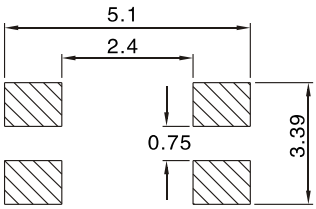
Part Number	Impedance (Ω) ± 25%	Test frequency (MHz)	DCR (Ω) Max	Rated Current (A) Max	Rated Voltage (V)	Insulation resistance (Min)
SF1608–800	80	100	0.07	3.0	50	10MΩ
SF1608–121	120	100	0.07	3.0	50	10MΩ
SF1608–201	200	100	0.10	2.0	50	10MΩ
SF1608–601	600	100	0.30	1.5	50	10MΩ
SF1608–801	800	100	0.35	1.0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

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



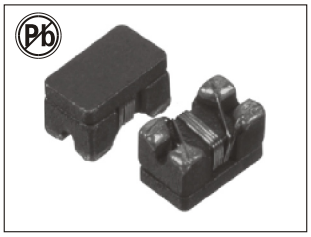






- Inductance Testing: 100MHz E4991A
- RDC:QuadTech 1880 Milliohm meter
- Operating temperature: –40℃ to +85℃
- Storage Temperature: 40℃Max,70%RH Max
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number

Note:All specifications subject to change without notice.

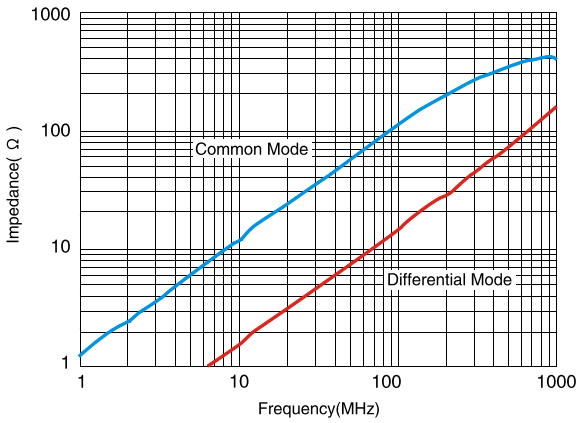


SMD WIRE WOUND COMMON MODE FILTER

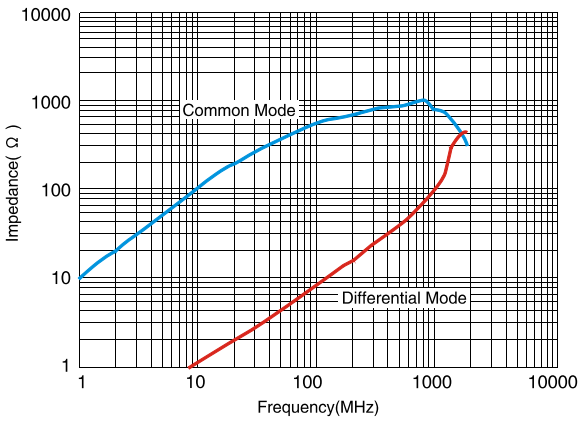
SF1608 SERIES

IMPEDANCE FREQUENCY:

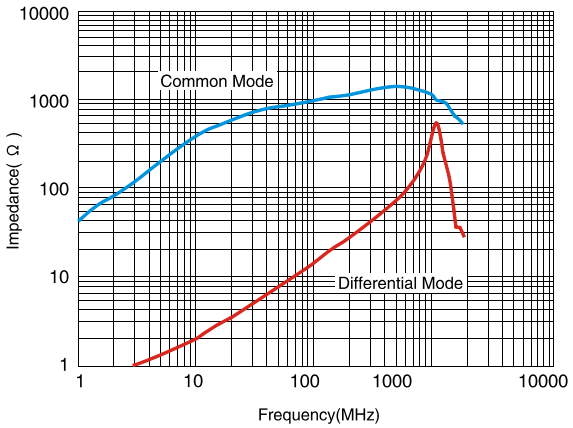
1608-121

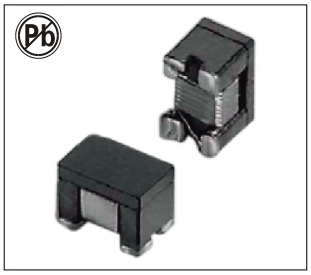


1608-601



1608-102





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

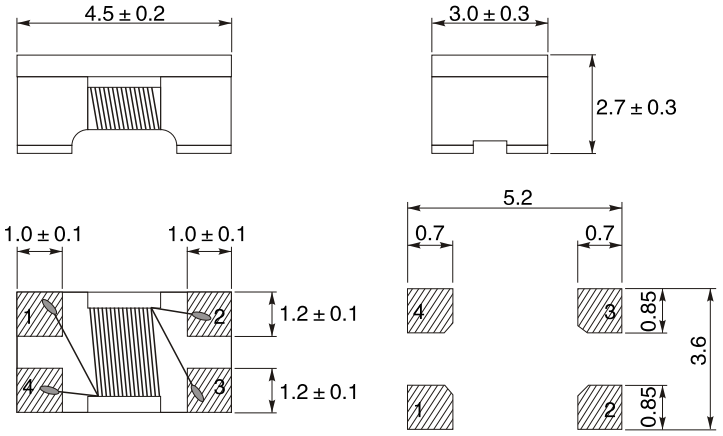
COMMON APPLCATIONS:

- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS,I nfotainment, 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	0.60	60
SF1812F–502Y	11	5000	560	0.80	60
SF1812F–582Y	–	5800	350	2.00	60
SF1812F–802Y	22	8000	320	2.65	60

PHYSICAL CHARACTERISTICS:



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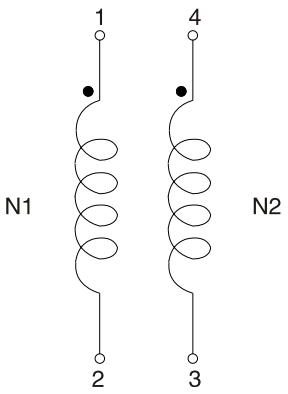
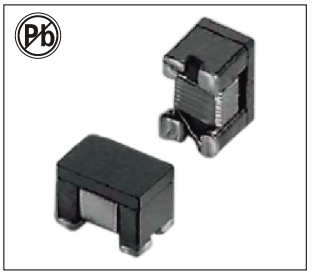


GENERAL SPECIFICATIONS:

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

SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES



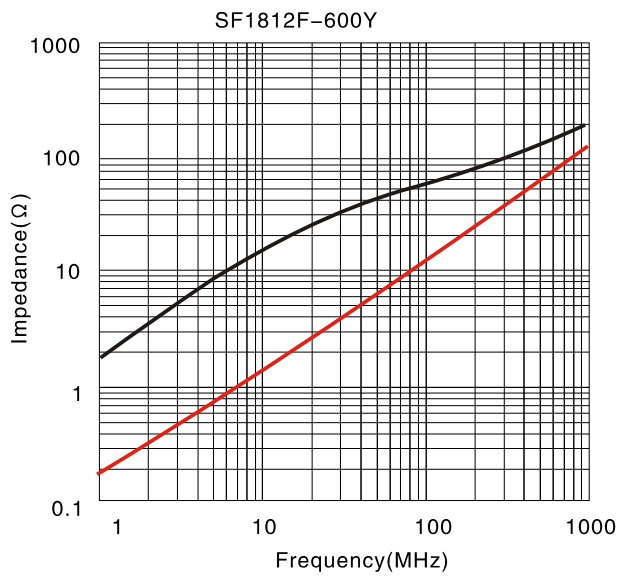
FEATURES:

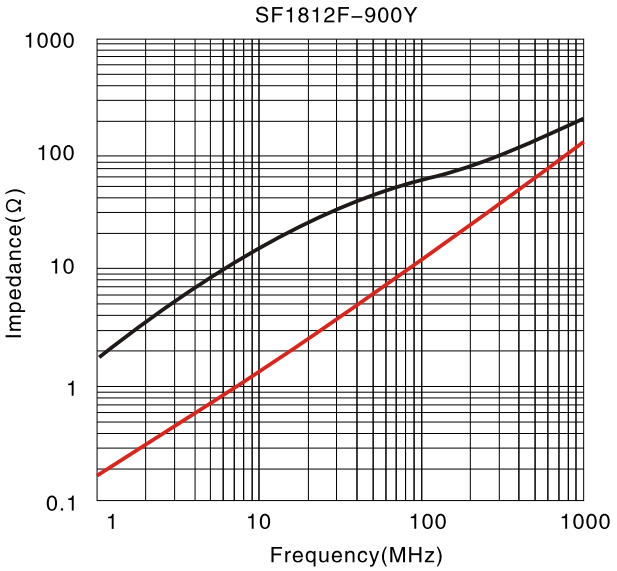
- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

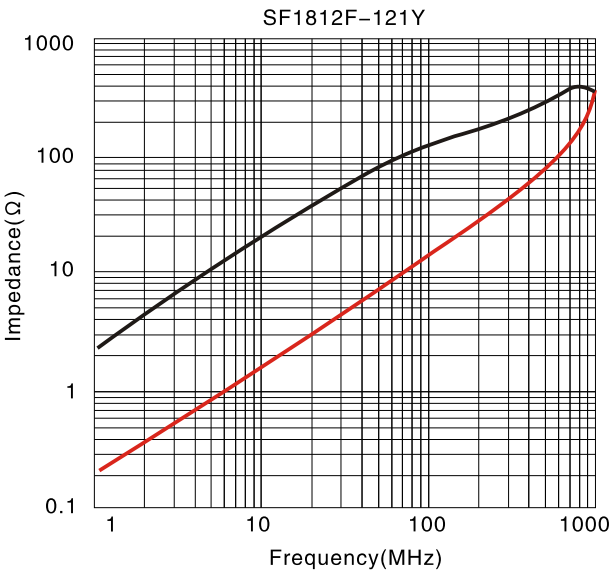
COMMON APPLCATIONS:

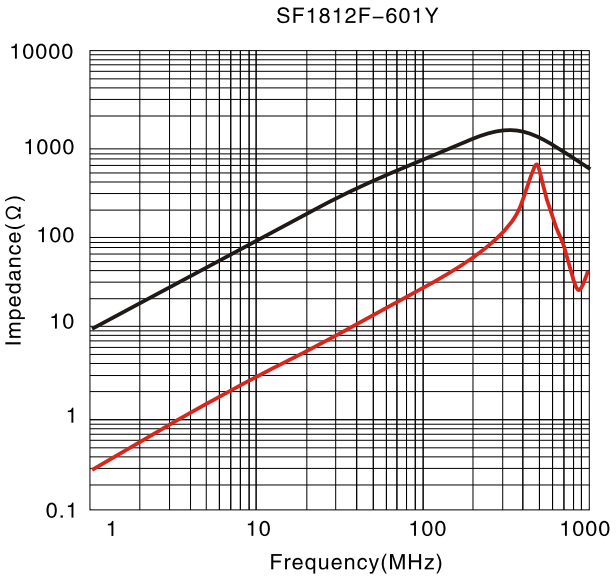
- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS,I nfotainment, Sensing, TCU
- Automotive Ethernet

FREQUENCY VS IMPEDANCE









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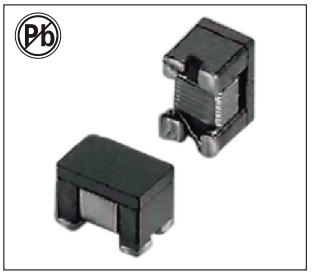
SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES



FEATURES:

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- Low Profile and Low cost

COMMON APPLCATIONS:

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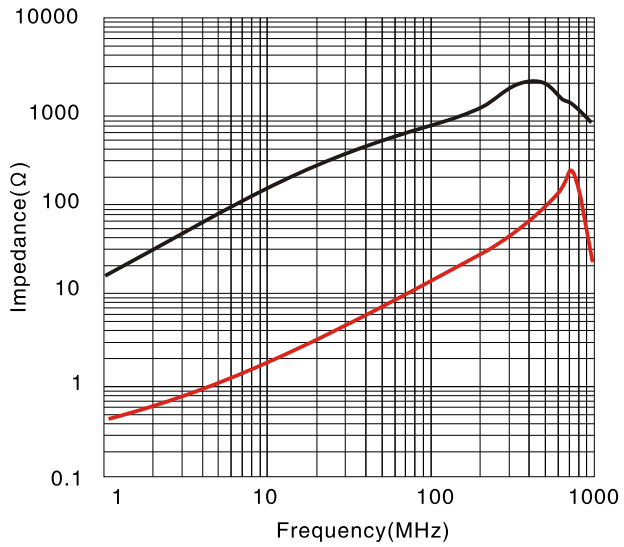
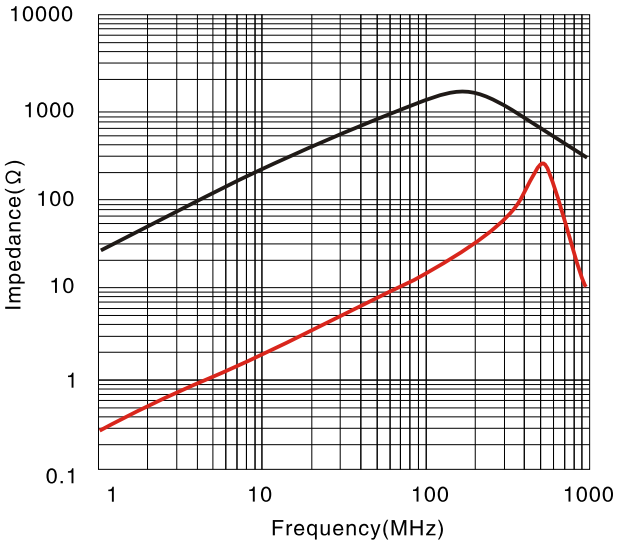
- Multimedia devices
- Automotive applications such as ADAS,I nfotainment, Sensing, TCU
- Automotive Ethernet

FREQUENCY VS IMPEDANCE

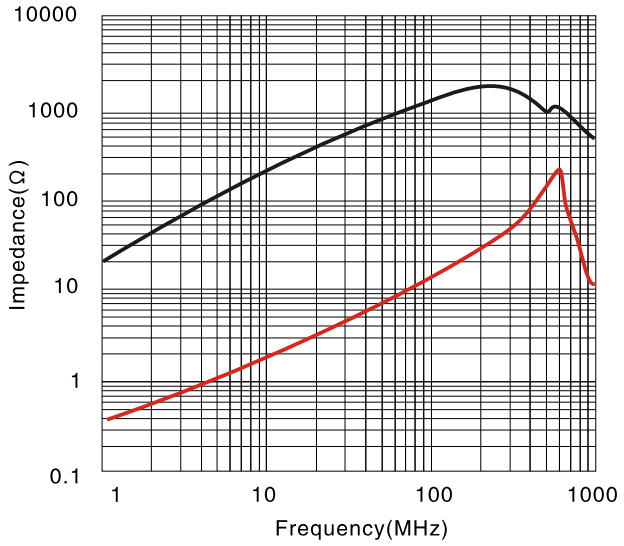
SF1812F-701Y



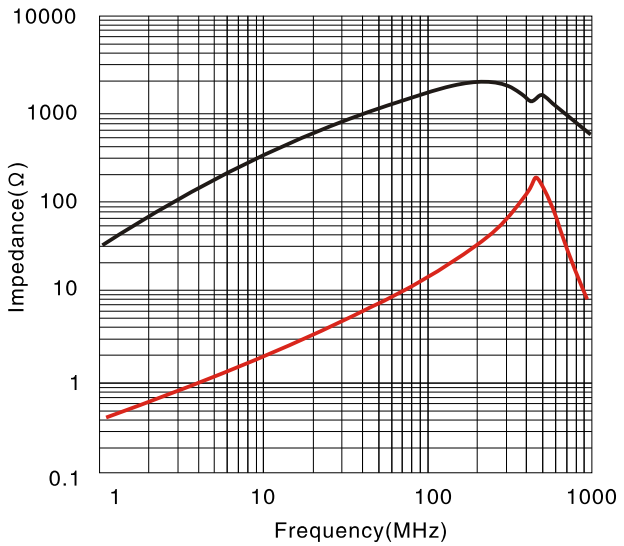
SF1812F-102Y



SF1812F-122Y



SF1812F-142Y



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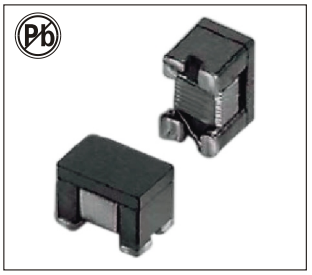
SURFACE-MOUNT WOUND COMMON MODE CHOKES

SF1812F SERIES



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- Multimedia devices
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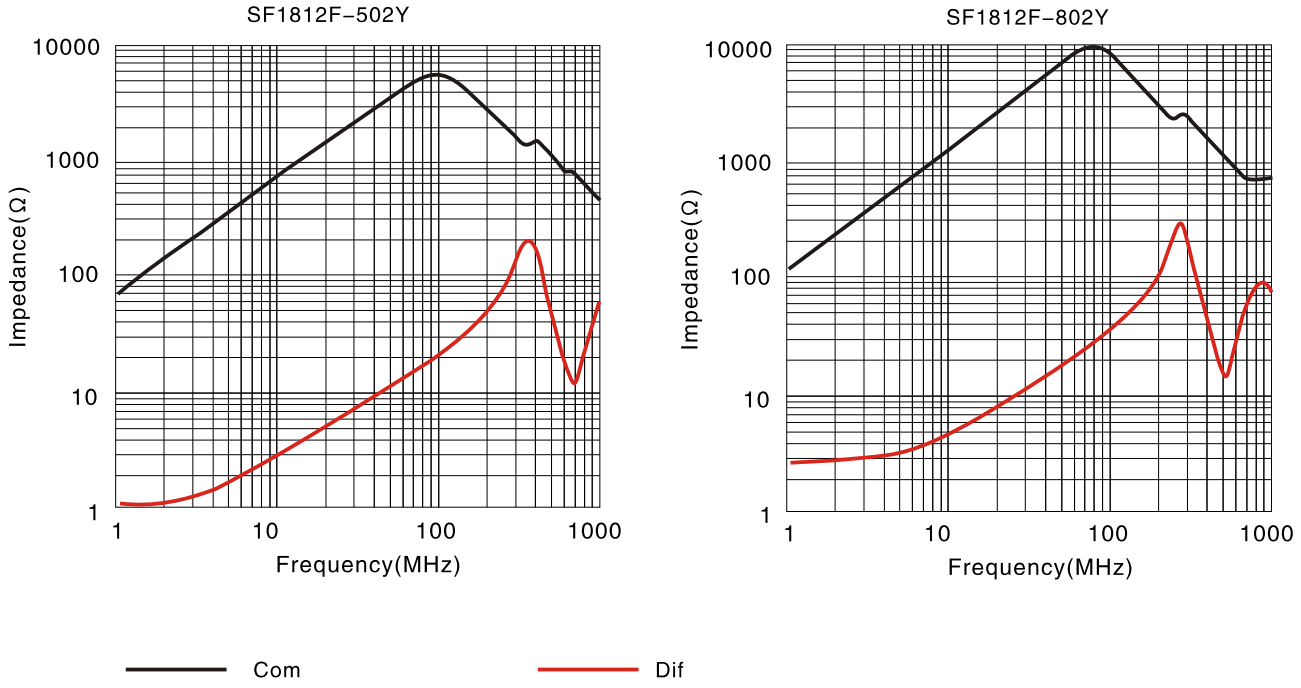
- Automotive Ethernet

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

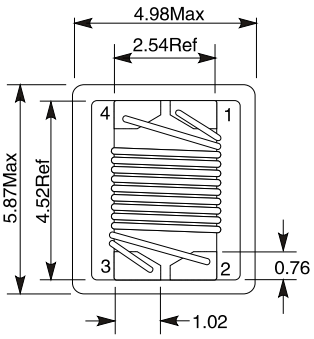
ELECTRICAL CHARACTERISTICS:

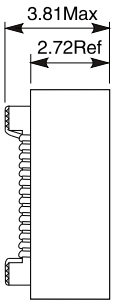
Part number	Inductance ±20%(uH) 100KHz,0.1V	Q 1MHz	DCR Max(Ω)	SRF Min(MHz)	Isat (mA)	Irms (mA)
SF1812S-1R0M	1.0	38	0.2	285	2400	2100
SF1812S-2R2M	2.2	29	0.33	175	1500	1200
SF1812S-4R7M	4.7	43	0.41	102	1500	1000
SF1812S-100M	10	35	0.74	74	800	780
SF1812S-150M	15	37	0.96	65	700	710
SF1812S-220M	22	38	1.84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

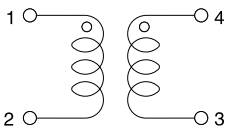
1. DC current at which the inductance drops 10% (typ) from its value without current.
2. Current that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maxi-mum ratings.
3. Electrical specifications at 25 ℃ .
4. Ambient temperature -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 ℃

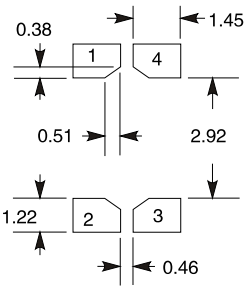
PHYSICAL CHARACTERISTICS & WINDING:

Dimensions are in mm



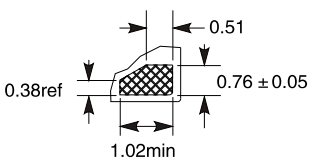






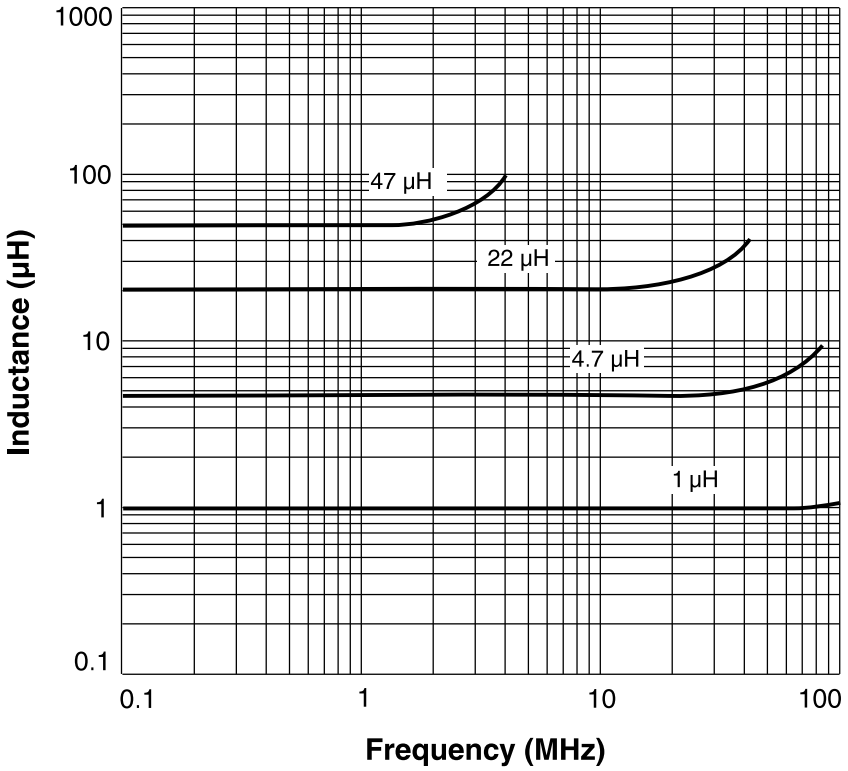
Recommended Land Pattern

Pad Detail

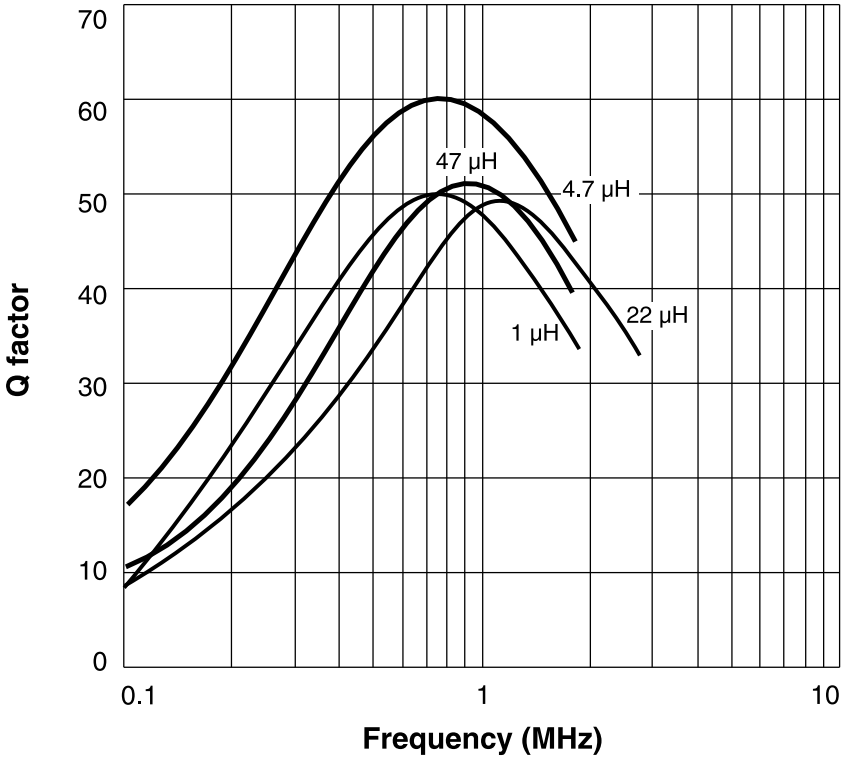


PERFORMANCE CURVE:

Typical L vs Frequency

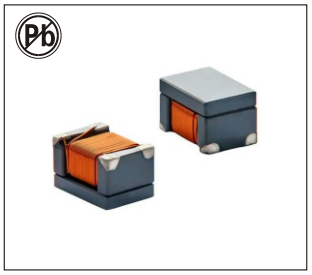


Typical Q vs Frequency



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

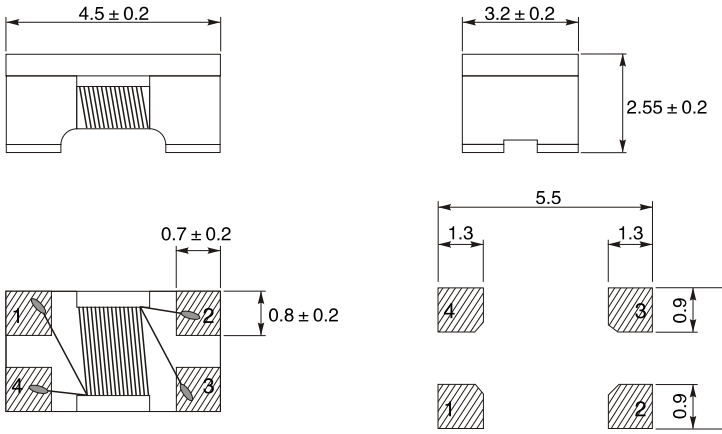
COMMON APPLICATIONS:

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

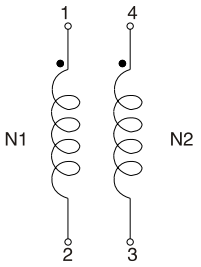
ELECTRICAL CHARACTERISTICS:@25℃

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:



WINDING:

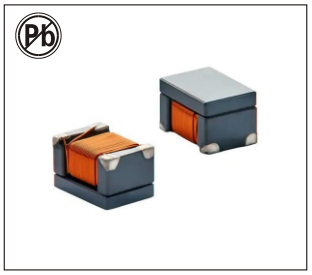


GENERAL SPECIFICATIONS:

- 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)

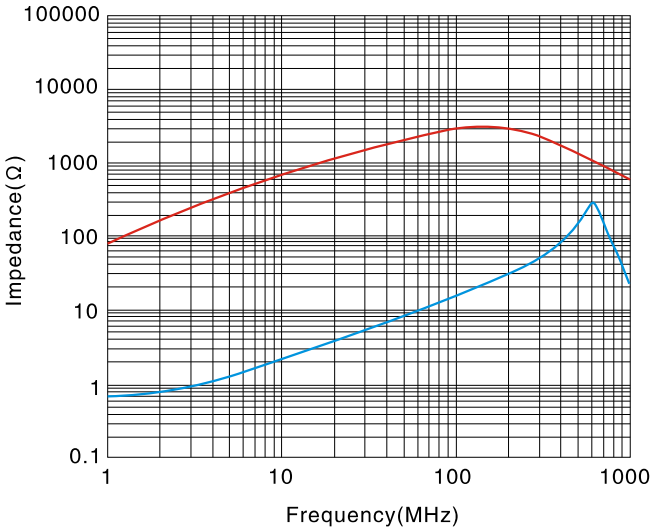
Note:All specifications subject to change without notice.

AUTOMOTIVE SIGNAL COMMON MODE CHOKES
SF4526F SERIES

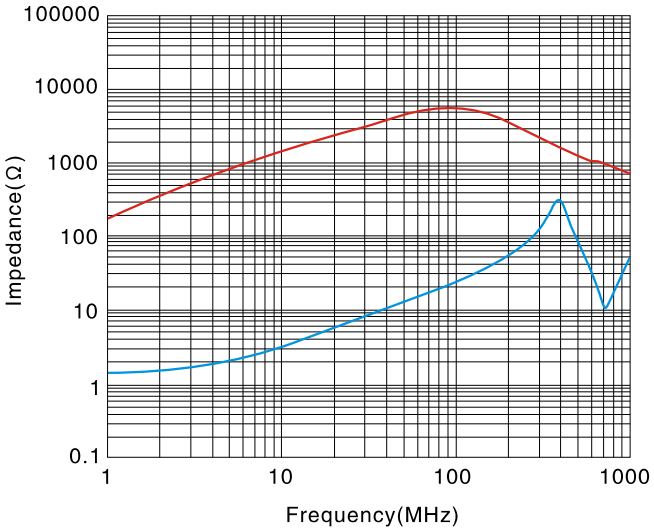


FREQUENCY VS IMPEDANCE

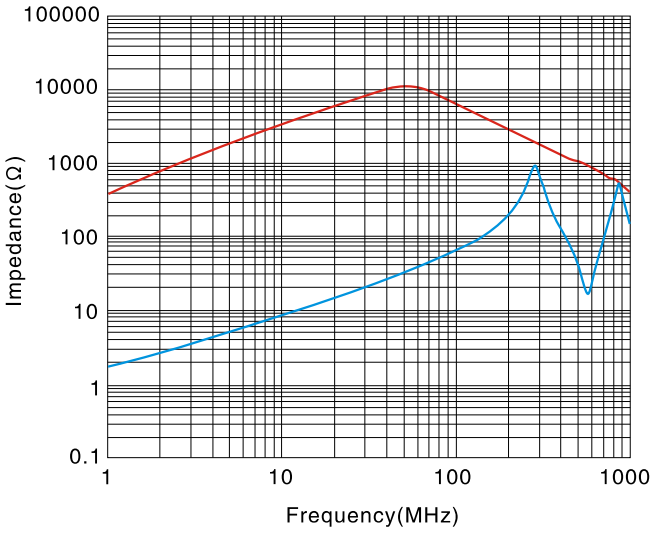
SF4526F–110Y



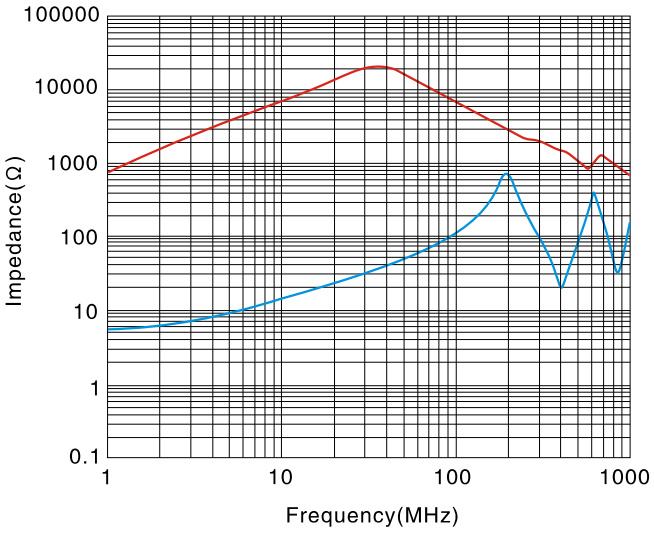
SF4526F–220Y



SF4526F–510Y



SF4526F–101Y



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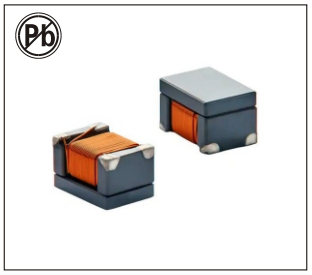
AUTOMOTIVE SIGNAL COMMON MODE CHOKES

SF4528F SERIES



FEATURES:

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

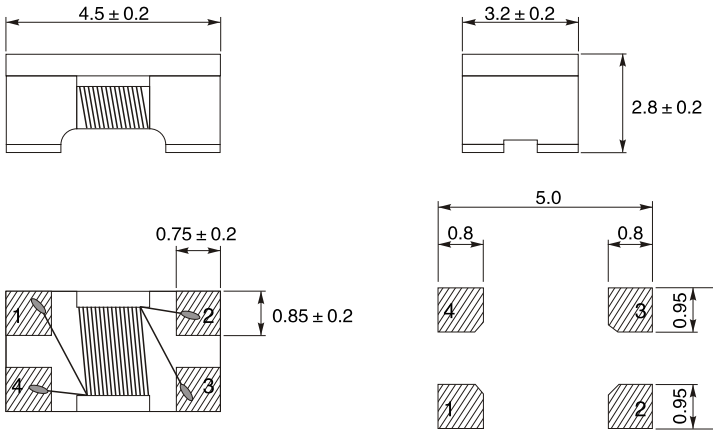
COMMON APPLICATIONS:

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

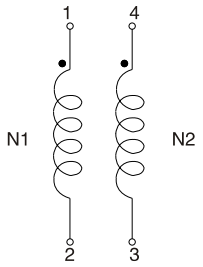
ELECTRICAL CHARACTERISTICS:@25℃

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:

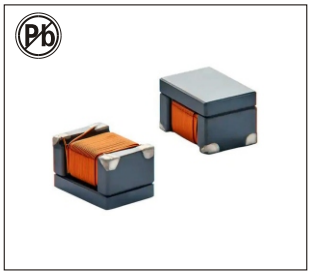


GENERAL SPECIFICATIONS:

- 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)

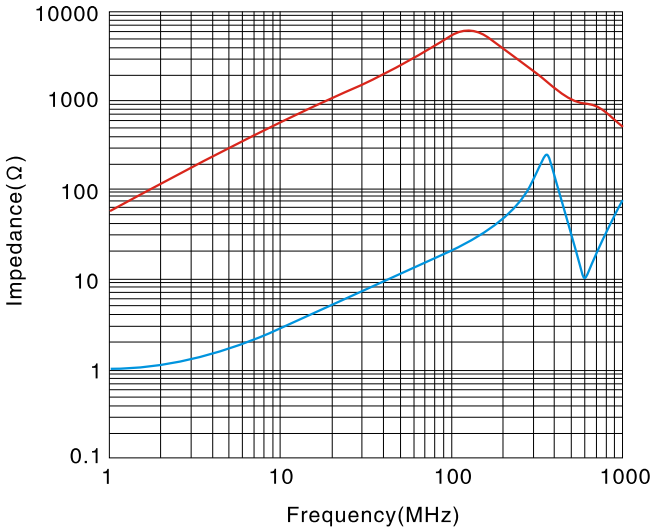
Note:All specifications subject to change without notice.

AUTOMOTIVE SIGNAL COMMON MODE CHOKES
SF4528F SERIES

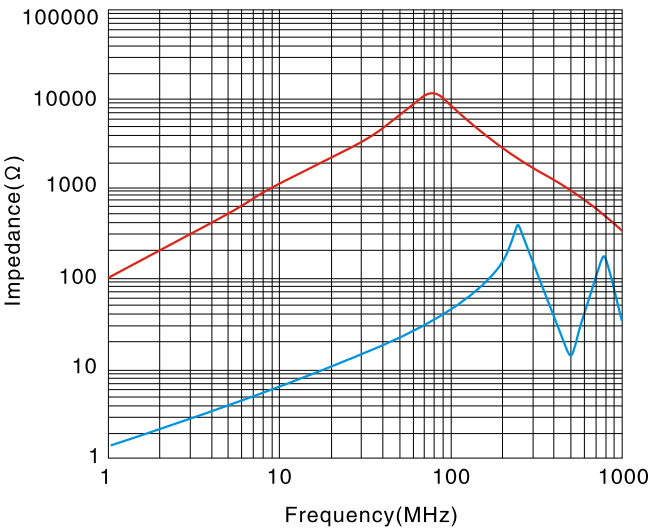


FREQUENCY VS IMPEDANCE

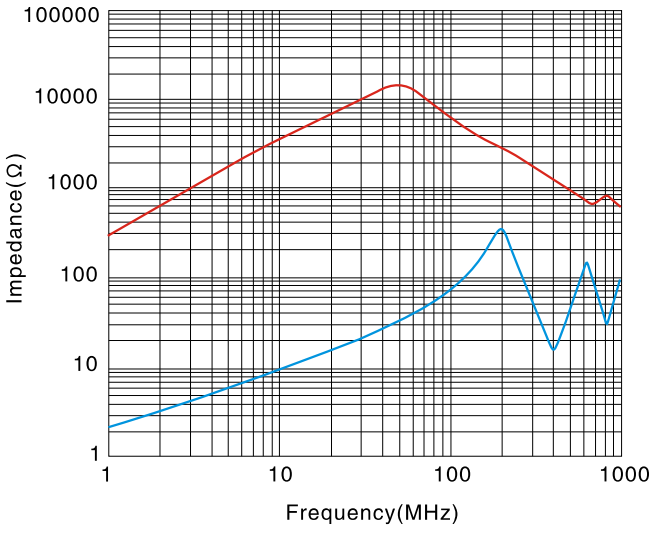
SF4528F–110Y



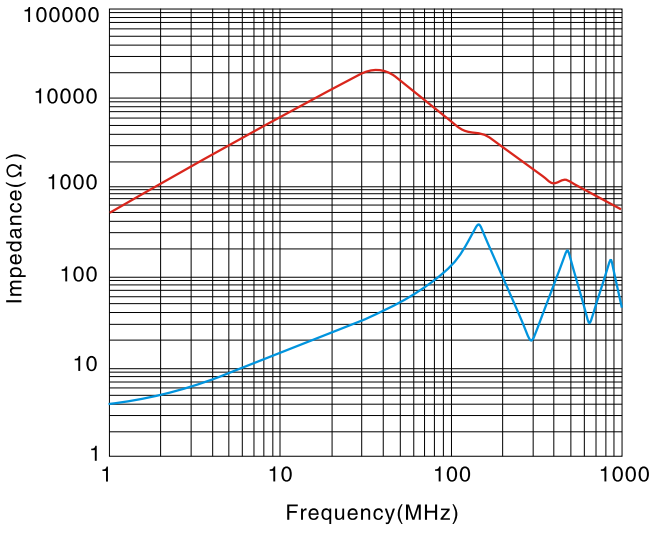
SF4528F–220Y



SF4528F–510Y



SF4528F–101Y



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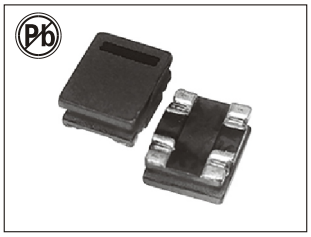


SMD WIRE WOUND COMMON MODE FILTER

SF5045 SERIES

FEATURES:

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

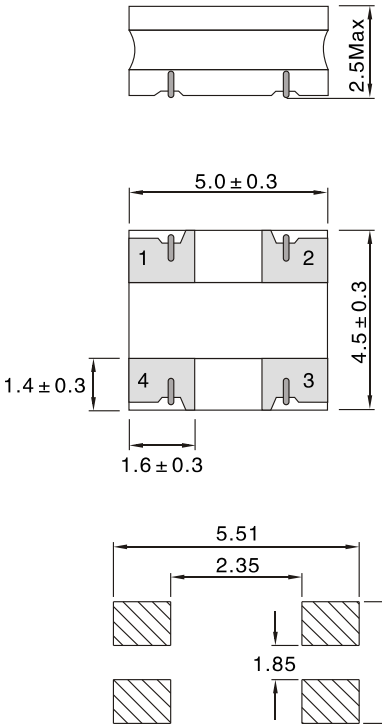
APPLCATIONS:

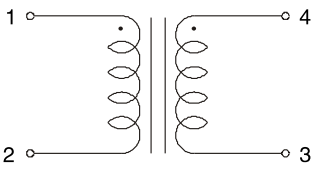
- Common mode noise suppression of signal lines in high speed and high density digital equipment such as personal computers and peripherals.

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

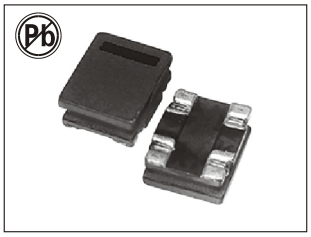
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:





- 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

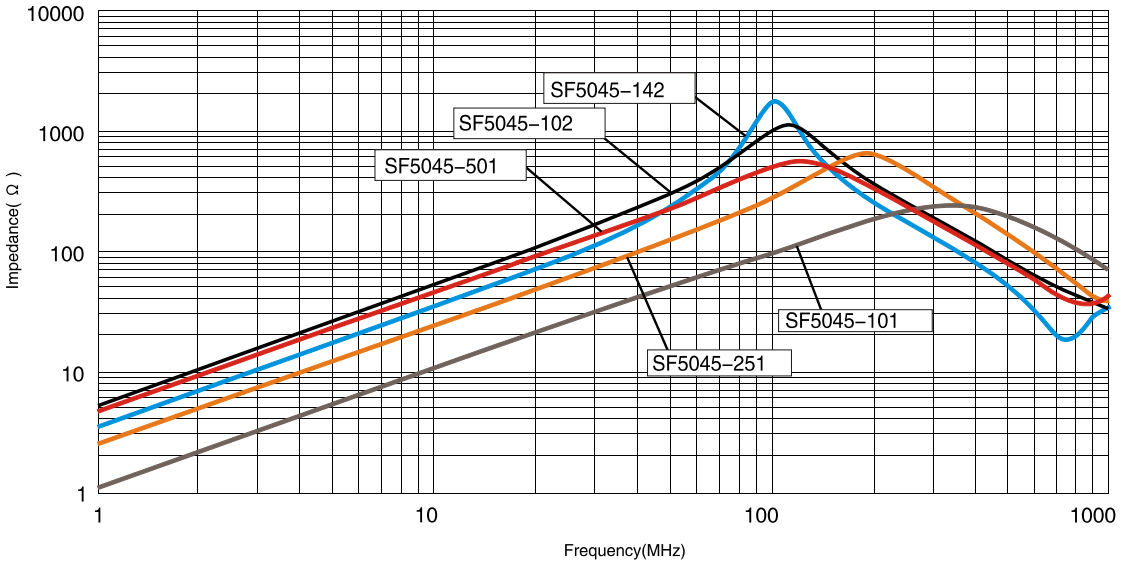
Note:All specifications subject to change without notice.



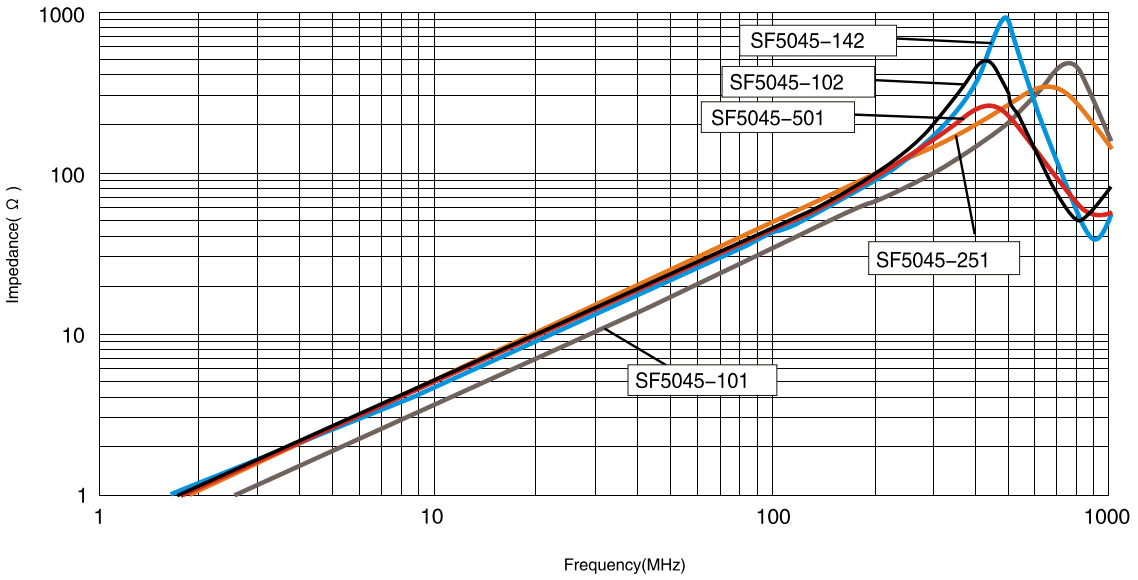
SMD WIRE WOUND COMMON MODE FILTER
SF5045 SERIES

IMPEDANCE FREQUENCY:

Common Mode

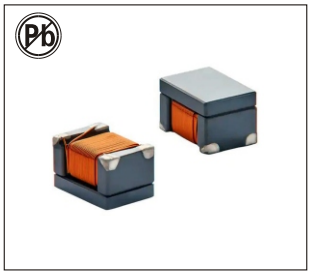


Differential Mode



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:

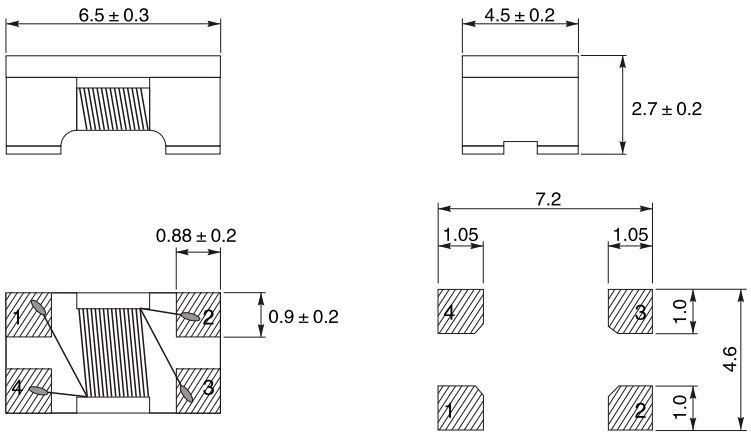
- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU
- Automotive Ethernet

ELECTRICAL CHARACTERISTICS:@25℃

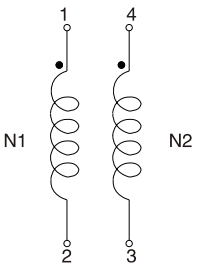
Part Number	Inductance (uH)+50%/–30% 100KHz	Rated current (A)	DCR (mΩ).	Return loss(dB) Min		
				1–10MHz	30MHz	60MHz
SF6527F–101Y	100	0.35	2000	–28	–23	–18

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.