

SMD LINE FILTER

SF0503, 0602 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 (Qty:0503:500pcs, 0602:1000pcs)
- Bulk packaging Available for Smaller Quantities

COMMON APPLICATIONS:

- 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	L1,L2 @10KHz 0.1Vrms (μ H) +50% -30%	Freq. rang (μ H)	Impedance min(Ω)	DCR(Ω) (each Winding)		Rated Current (mA)typ.
SF0503				max.	typ.	
110YL	11	100~500	450	0.180	0.130	100
220YL	22	40~300	900	0.230	0.170	100
330YL	33	30~250	1000	0.270	0.200	100
500YL	50	20~150	1400	0.320	0.240	100

Part Number	L (μ H)	L-L (μ H) max.	DCR(Ω) max. N1=N2	Rated Current (mA)	Impedance(Z)	
SF0602					Freq.range MHz	min (Ω)
100YL	10 $\pm$ 50%	1	0.240	300	350~570	600
470YL	47 $\pm$ 50%	4	2.160	300	4~1600	140
820YL	82 $\pm$ 50%	4	2.200	300	3~850	220
101YL	100 $\pm$ 50%	8	0.220	300	3~660	260
181YL	180 $\pm$ 50%	8	0.250	300	3~250	500
221YL	220 $\pm$ 50%	10	0.280	300	3~210	600
331YL	330 $\pm$ 50%	10	0.300	300	3~120	900

TECHNICAL INFORMATION

• Materials:

1. Core: Ferrite Core(0503), Ferrite Toroidal Core(0602)
2. Wire: Enamelled Copper Wire(Class F)
3. Base: LCP (UL 94V-0)(0503), LCP(0602)
4. Terminal: Cu / Ni / Sn
5. Adhesive: Epoxy Resin

• General Specification:

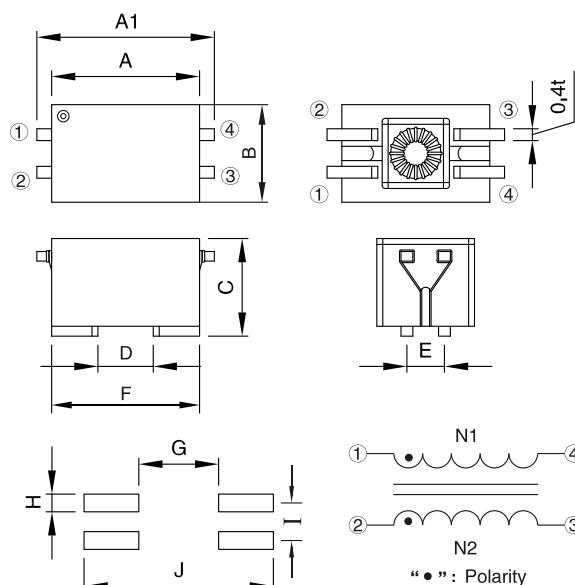
1. Storage Temperature: -40°C ~ $+125^{\circ}\text{C}$ (0503), -40°C ~ $+85^{\circ}\text{C}$ (0602)
2. Operation Temperature: -40°C ~ $+105^{\circ}\text{C}$ (0503), -40°C ~ $+85^{\circ}\text{C}$ (0602)
3. Temperature Rise Included: 25°C max(0503), 20°C max(0602) at Rated Current
4. Resistance to solder heat: 260°C , 10 secs.

Dimensions(mm)

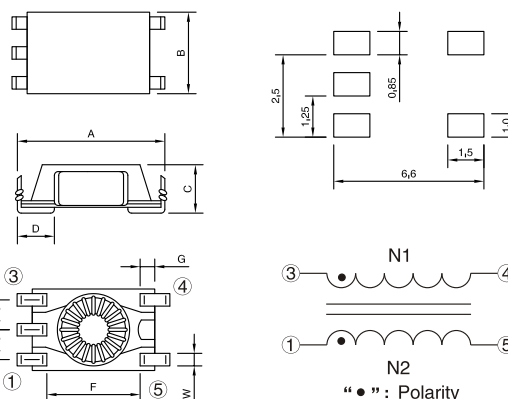
Series	A1	A	B	C	D	E	F	G	H	I	J
SF0503L	6.00 $\pm$ 0.3	5.00 $\pm$ 0.3	3.30 $\pm$ 0.3	3.30 $\pm$ 0.2	3.10 typ.	1.27 typ.	5.00 typ.	2.70 typ.	0.60ref.	1.27ref.	6.40ref.

Series	A	B	C	D	E	F	G	W
SF0602L	6.50 max	3.60 $\pm$ 0.15	1.65 $\pm$ 0.15	0.90min	1.25 $\pm$ 0.10	3.4 $\pm$ 0.2	0.8max	0.55 $\pm$ 0.10

PHYSICAL CHARACTERISTICS:



SF 0503-L



SF 0602

Note: All specifications subject to change without notice.