

Common Mode Choke – SCMC0503P2S-510

Features:

- High impedance at high frequency effects excellent noise suppression performance.
- The choke coils structure enables noise suppression without degrading the signal.

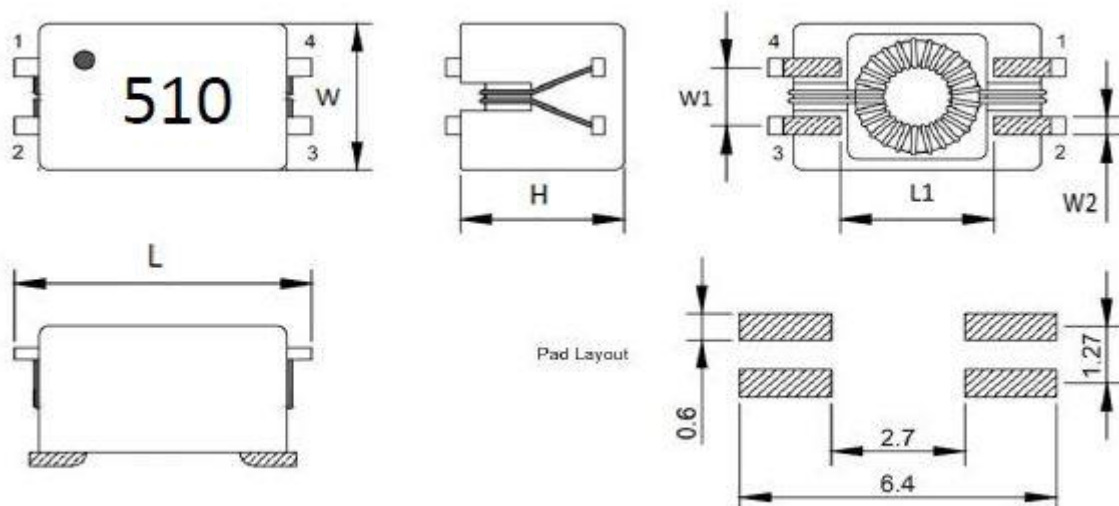
Applications:

- The SCMC Series is SMD common mode filter specifically designed to eliminate common mode noise in USB 2.0, IEEE1394, and LVDS applications.

Shape and dimension:

Part Number	Dimensions (mm)					
	L	W	H	W1	W2	L1
SCMC0503P2S-510	6.00±0.3	3.30±0.3	3.30 Ref	1.27 Ref	0.40 Ref	3.10 Ref

1. Operating temperature -40°C ~ +125°C
2. Storage conditions -40°C ~ +40°C, 75% RH max



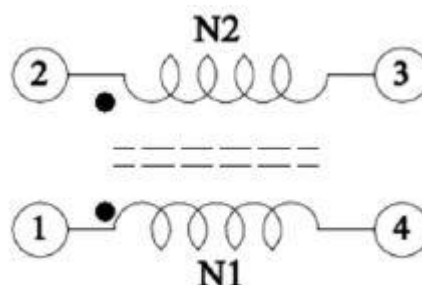
Specifications of SCMC05032S-510:

Part No.	L (N1=N2) 10KHz/0.1V		DCR (N1+N2) (Ω)	Rated Current (A)	Impedance 100MHz (Ω)	IR (M Ω)	Rated Volt (V)
		(μ H)	Max.	Max.	Typ	Min	Typ
SCMC0503P2S-510	51	+50%-30%	0.32	0.4	2500	10	80

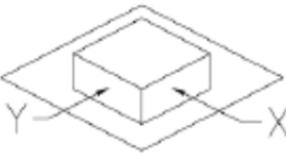
Material list:

No.	Location	Material
1	Core	Ferrite
2	Wire	Grade1 P180
3	Solder	Sn99.3 Cu0.7
4	Adhesive	XNR3614
5	Case	DAP
6	Solder	White

Equivalent Circuit Schematic:



Mechanical Performance:

Item	Test Method
Operating Temperature	Visual Inspection and measured with Side Calipers.
Appearance Inspection	No external defects by visual inspection
Terminal Strength 	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right)
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 100 M Ω at 100V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core
Temperature characteristics	Inductance coefficient (0~2,000) $\times 10 / ^\circ\text{C}$ (- 40~ + 125 $^\circ\text{C}$)
Humidity characteristics	Inductance deviation within $\pm 10\%$, after 96 hours in 90~95% relative humidity at 40 ± 2 $^\circ\text{C}$ and 1 hours drying under normal condition.
A test is made under the above mentioned condition , and it is kept for 2 hours in the normal	