

SCM Series

SMD Common Mode Inductor

Size 5040



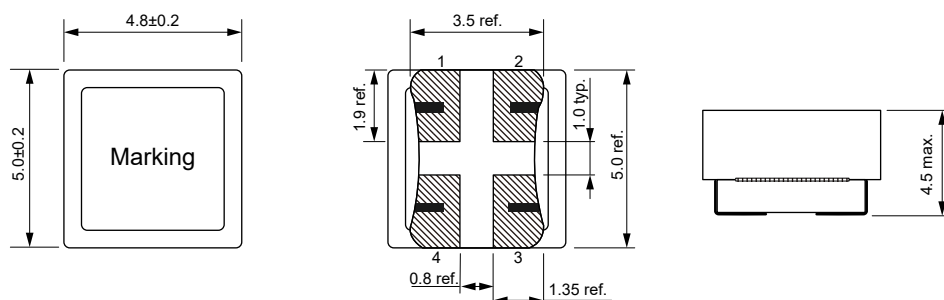
FEATURES

- Chip common mode filter for large current applications.
- Low profile design makes it optimal for surface mounting.
- Operating temperature: $-40\sim+105^{\circ}\text{C}$.
- Quantity: 1000pcs.

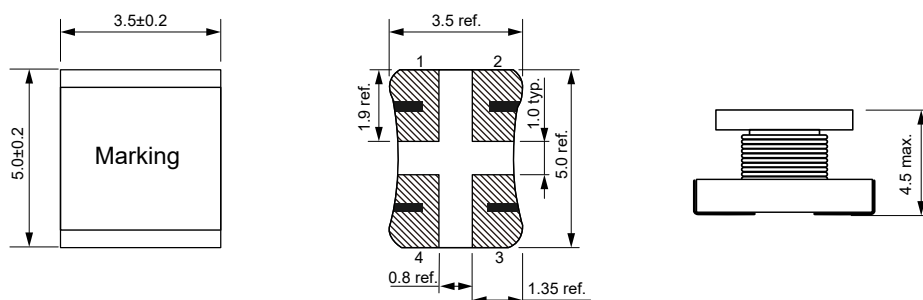
APPLICATIONS

- Countermeasure of Common mode noise in power lines for various devices.

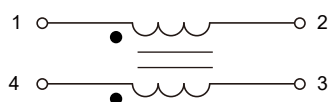
Dimensions: [mm] $Z\leq 3000\ \Omega$



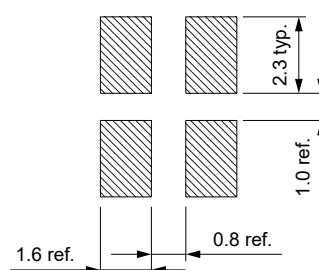
Dimensions: [mm] $Z=4000\ \Omega$



Schematic:



Land Pattern: [mm]

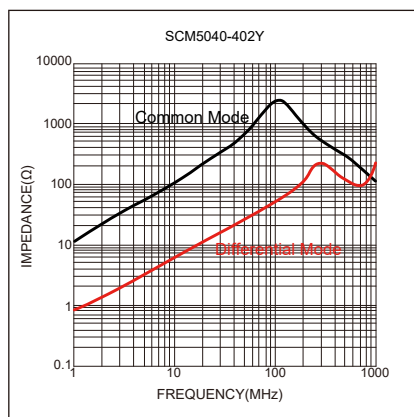
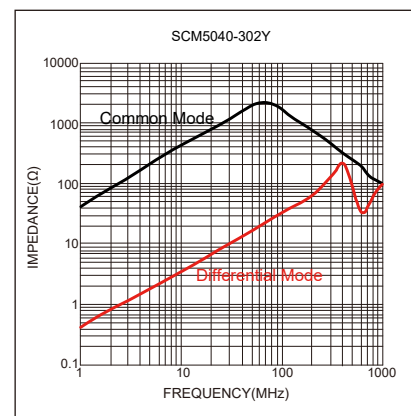
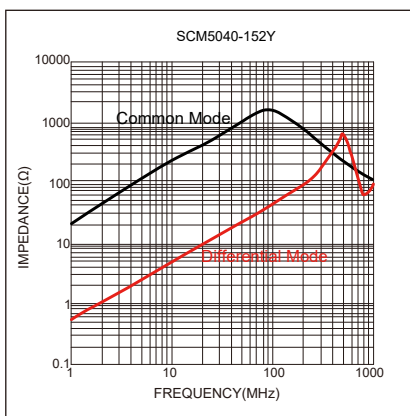
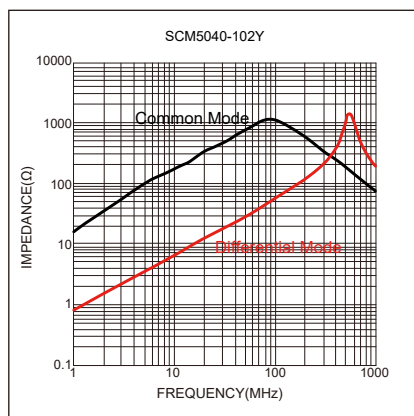
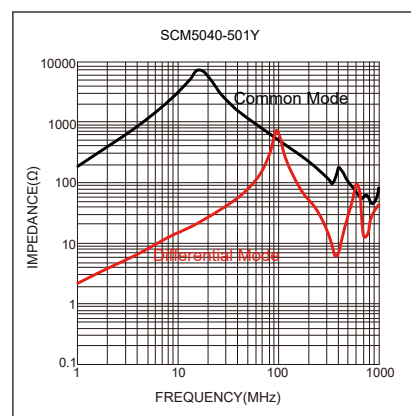
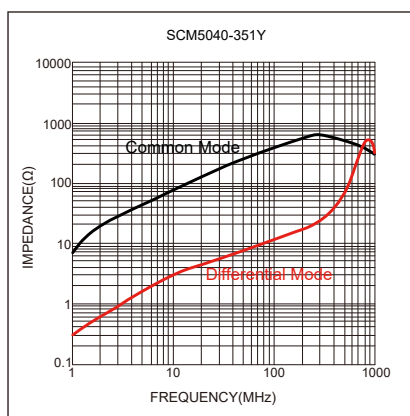
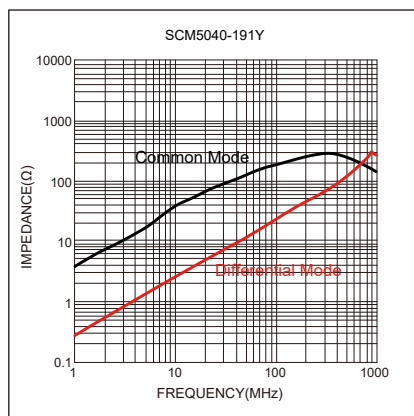


Electrical Properties:

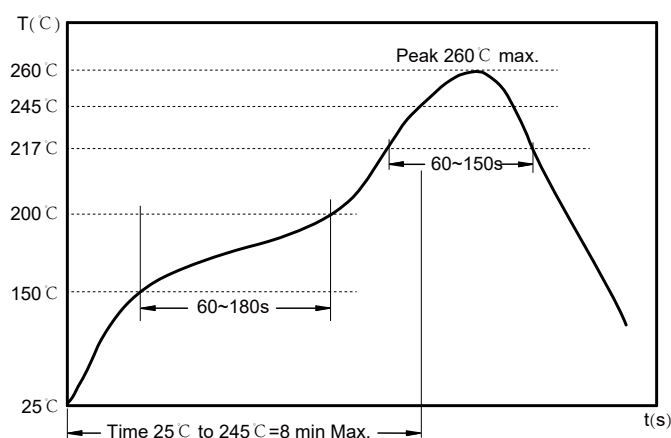
Part No	Impedance @ 100 MHz Typ. (Ω)	Inductance @ 100 KHz/0.1V Typ. (Ω)	DC Resistance Max. (Ω)	Rated Current Max. (A)	Rated Voltage Max. (Vdc)	IR Min. (M Ω)
SCM5040-191Y	190	0.6	0.02	5.0	50	10
SCM5040-351Y	350	1.1	0.04	2.0	50	10
SCM5040-501Y	500	2.3	0.23	1.0	50	10
SCM5040-102Y	1000	3.7	0.06	1.5	50	10
SCM5040-152Y	1500	5.6	0.10	1.0	50	10
SCM5040-302Y	3000	8.0	0.20	0.5	50	10
SCM5040-402Y	4000	1.8	0.30	0.2	50	10

Rated Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200°C / 60~180 sec.

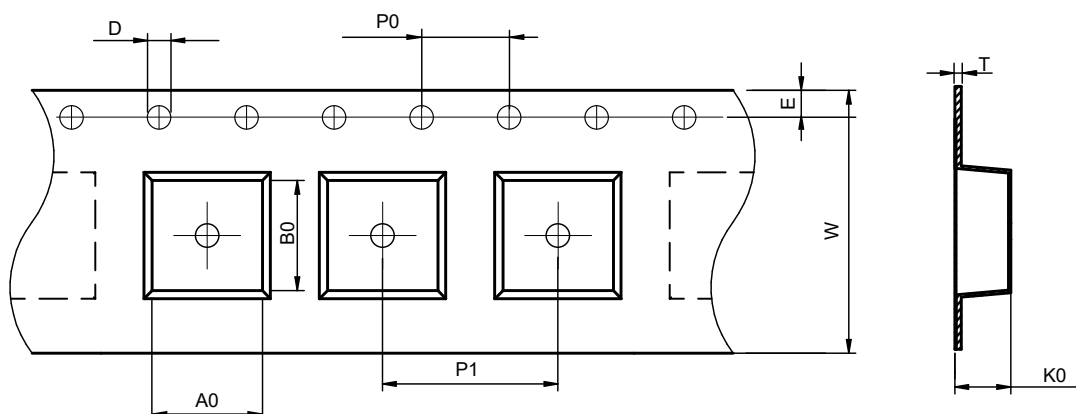
Allowed time above 217°C: 60~150 sec.

Max temperature: 260°C.

Max time at max temperature: 10 sec.

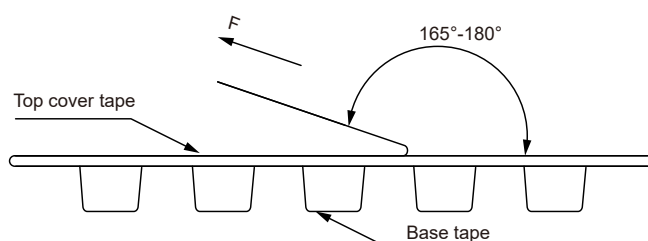
Packaging Information:

Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
SCM5040	5.3±0.1	5.3±0.1	1.5±0.1	4.0±0.2	12.0±0.1	16.0±0.3	4.6±0.1	1.75±0.1	0.40±0.05

Peel force of top cover tape:

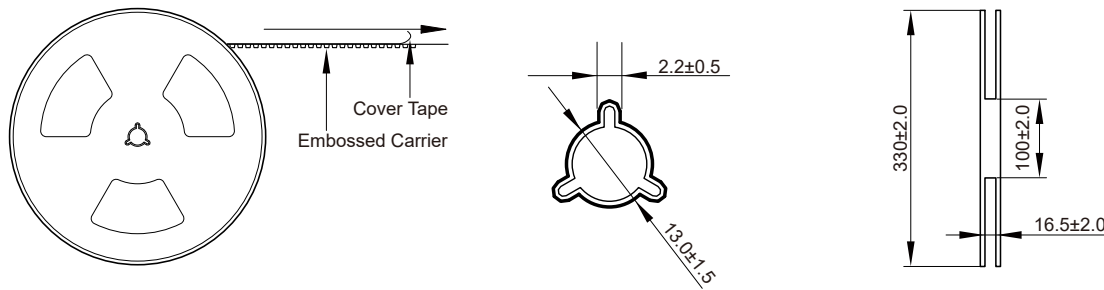


The peel force of top cover tape shall be between 0.1 to 1.17 N

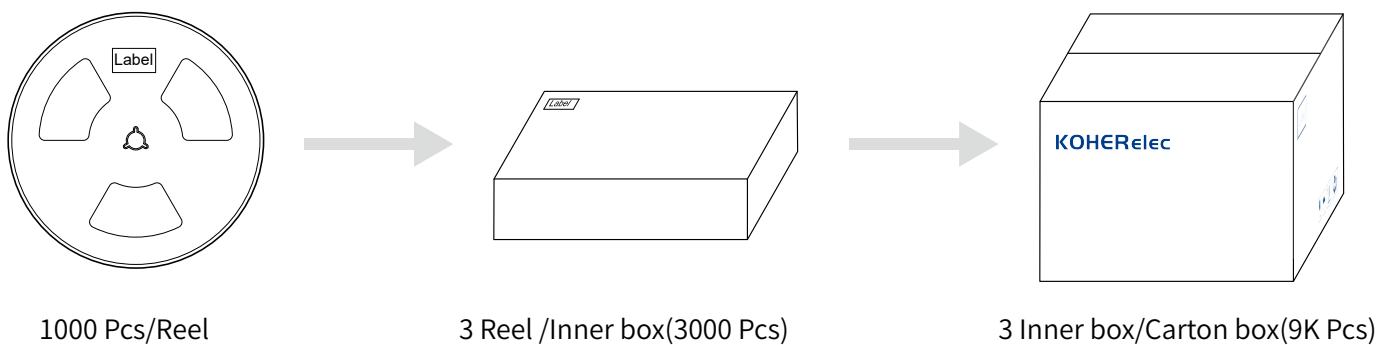
Product Marking:

Marking	Printing (Impedance)
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Reel Dimension : [mm]



Packaging Quantity:



Cautions and Warnings:

Storage Conditions :

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does. As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.