



# SCM Series

## SMD Common Mode Inductor

### Size 6536

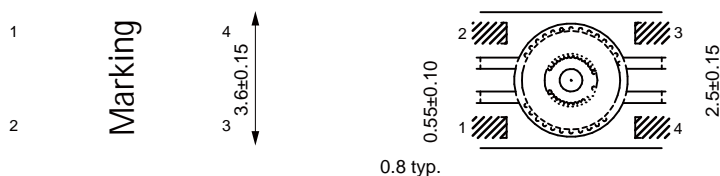
#### FEATURES

Chip common mode filter for large current applications.  
 Low profile design makes it optimal for surface mounting.  
 Operating temperature -40~+105

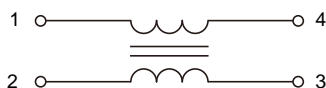
#### APPLICATIONS

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

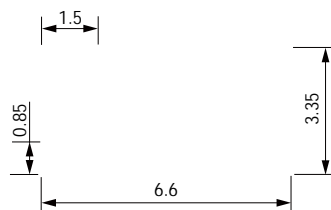
#### Dimensions: [mm]



#### Schematic:



#### Land Pattern: [mm]



#### Electrical Properties:

Part No	Inductance @ 10KHz/0.1V $\pm 50\%$ 1-4=2-3	Leakage Inductance @ 1MHz/1mA Typ. (nH) 1-4(2-3 short)	DC Resistance Max. 1-4=2-3	Rated Current Max. (A)	Rated Voltage Typ. (V)	Impedance Typ.		Hi-Pot (Vdc) 3mA/1S 1,4-2,3
SCM6536-100Y	10	580	0.24	0.3	80	1200	35-570	250
SCM6536-470Y	47	280	0.16	0.3	80	300	4-1600	250
SCM6536-510Y	51	270	0.16	0.3	80	300	4-1600	250
SCM6536-820Y	82	370	0.20	0.3	80	440	3-850	250
SCM6536-101Y	100	530	0.22	0.3	80	500	3-660	250
SCM6536-181Y	180	760	0.25	0.3	80	1000	3-250	250
SCM6536-221Y	220	950	0.28	0.3	80	1200	3-210	250
SCM6536-331Y	330	1300	0.30	0.3	80	2000	3-120	250

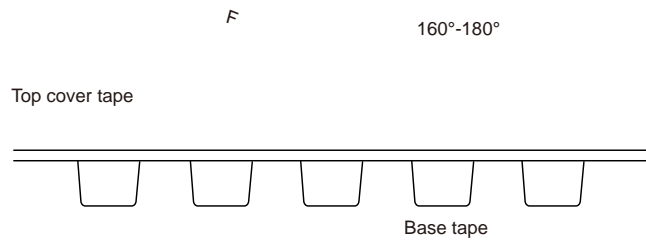
Temperature Rise Current: The actual value of DC current when the temperature rise is  $T=40^{\circ}\text{C}$







Peel force of top cover tape:





## 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. The warranty period is one year.
- 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.

### Conformal coating:

- The inductance value may change due to the high cure stress of the resin used for coating or molding.
- An open circuit may occur due to mechanical stress from the resin, its amount, cured shape, or operating conditions.
- Please exercise careful attention when selecting a resin for the coating or molding process.
- Prior to using the coating resin, please verify that no reliability issues are observed.
- When applying conformal coating for product protection, materials with a high shrinkage rate should be avoided. If such materials must be used, it is recommended to apply silicone around the inductor core in a closed loop to prevent the conformal coating from flowing into or penetrating the windings, thereby avoiding open-circuit failures caused by the coating's thermal stress.