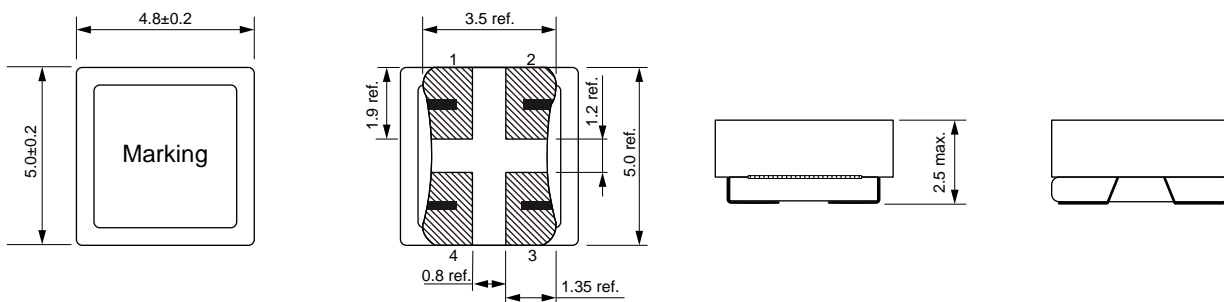


## SMD Common Mode Inductor Size 5020



- Chip common mode filter for large current applications.
  - Optimal for surface mounting with low profile 2.5 mm.
  - Operating temperature -40~+125 °C
  - Quantity:2500pcs
- 
- Countermeasure of Common mode noise in power lines for various devices

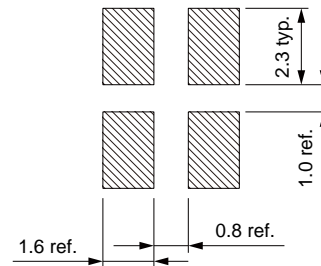
### Dimensions: [mm]



### Schematic:



### Land Pattern: [mm]

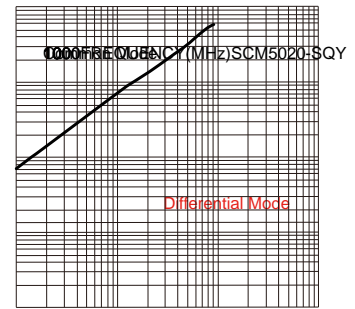
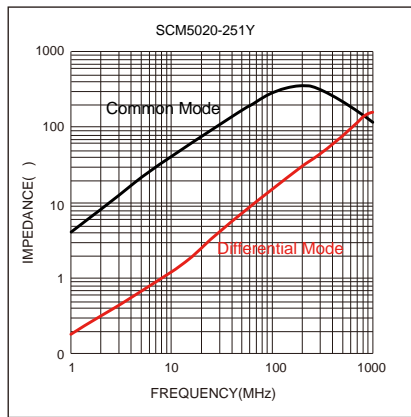
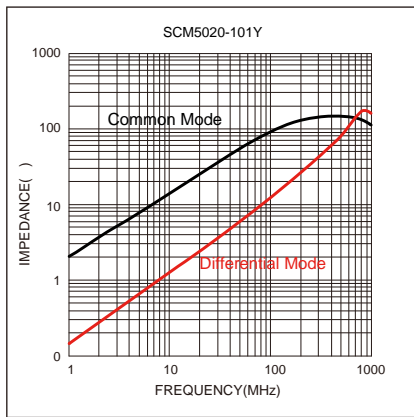


### Electrical Properties:

Part Number	Quantity	Inductance	DC Resistance	Inductance Tolerance	DC Resistance Tolerance
SCM5020-101Y	100	13	6.0	50	10
SCM5020-251Y	250	20	5.0	50	10
SCM5020-501Y	500	27	4.0	50	10
SCM5020-102Y	1000	34	2.0	50	10
SCM5020-142Y	1400	55	1.5	50	10
SCM5020-152Y	1500	56	1.5	50	10

Temperature Rise Current will cause the coil temperature rise approximately  $t_{40}^{\circ}\text{C}$

# Typical Electrical Characteristics:



## 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.
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