#### **EMC Components**

#### TCM Series TCM1210 Type

## Common Mode Choke Coils for Signal Line SMD

#### **FEATURES**

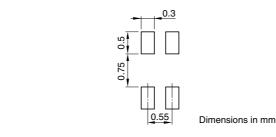
- This compact thin-film common mode filter has with a size of L1.25×W1.0mm.
- We have succeeded in reducing its thickness to 0.6mm.
- By providing wide bandwidth (cutoff frequency: 3GHz) for differential mode transfers while maintaining common mode impedance, this filter provides noise reduction and has almost no effect on high-speed differential transfer line signals.
- This product contains no lead and supports lead-free soldering.



#### **APPLICATIONS**

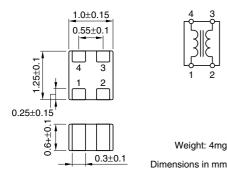
For radiant noise reduction in electronics devices. LVDS lines and IEEE1394 interfaces used in notebook PCs and LCD monitors.

#### RECOMMENDED PC BOARD PATTERN



#### **SHAPES AND DIMENSIONS**

#### **CIRCUIT DIAGRAM**

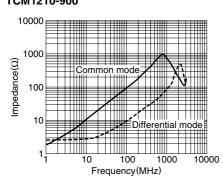


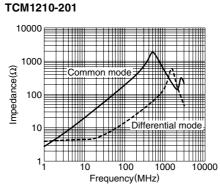
#### **ELECTRICAL CHARACTERISTICS**

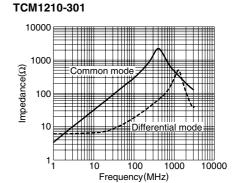
| Part No.       | Common mode impedance $(\Omega)$ [100MHz] |      | DC resistance | Rated current (mA)max. | Insulation resistance (MΩ)max. | Rated voltage (V)max. |
|----------------|---|------|---------------|------------------------|--------------------------------|-----------------------|
|                | min.                                      | typ. | — (Ω)max.     | (IIIA)IIIax.           | (IVIS2)111ax.                  | (V)IIIax.             |
| TCM1210-900-2P | 65  | 90   | 1.75          | 100                    | 10                             | 10                    |
| TCM1210-201-2P | 150                                       | 200  | 2.7           | 100                    | 10                             | 10                    |
| TCM1210-301-2P | 225                                       | 300  | 3.5           | 50                     | 10                             | 10                    |

<sup>•</sup> Operating temperature range: -25 to +85°C

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS TCM1210-900 TCM1210





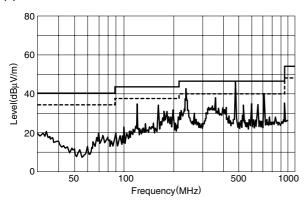


## **EMC Components**

### TCM Series TCM1210 Type

Common Mode Choke Coils for Signal Line SMD

## TYPICAL EMC SUPPRESSION FEFFECT (1) Without EMC



#### (2) With TCM1210-900-2P

