

# Common Mode Filters(SMD) For High-speed Differential Signal Line

Conformity to RoHS Directive

## TCM Series TCM1210G Type

### FEATURES

- The TCM1210G(L1.25×W1.00×T0.60mm) is compact sized common mode filter.
- By providing wide bandwidth (cutoff frequency: 3GHz) for differential mode, this product has almost no effect for high-speed differential signals and can suppress the radiated emission.
- This product contains no lead and supports lead-free soldering.

### APPLICATIONS

- High speed interface(LVDS, IEEE1394 and USB2.0) in electronics devices.
- PDP/LCD/DLP/PJ TVs, DVD players, notebook PCs, DVC, DSC, amusement machines, portable audio, digital cellular phones, etc.

### TEMPERATURE RANGE

|           |              |
|-----------|--------------|
| Operating | -25 to +85°C |
|-----------|--------------|

### PACKAGING STYLE AND QUANTITIES

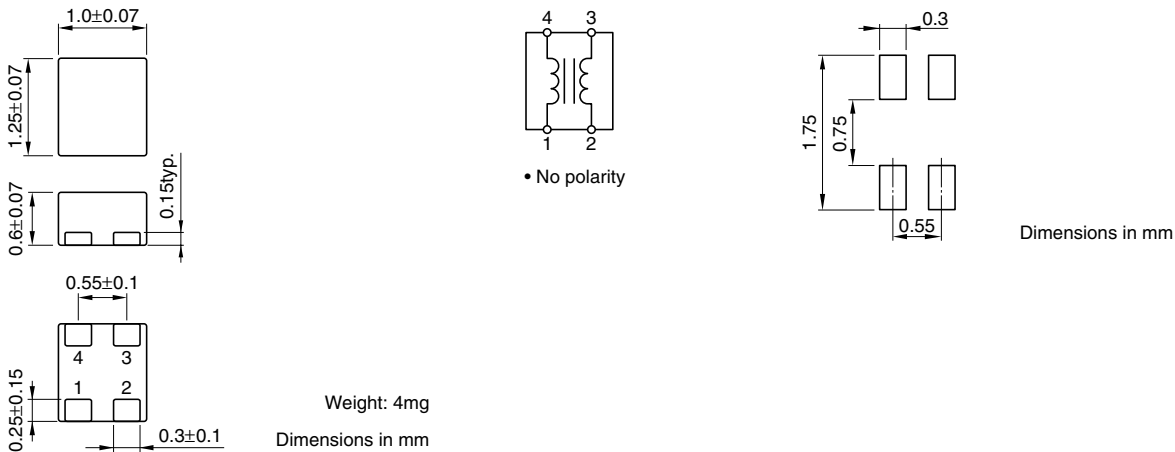
|                 |                  |
|-----------------|------------------|
| Packaging style | Quantity         |
| Taping          | 4000 pieces/reel |

### PRODUCT IDENTIFICATION

|     |      |     |       |      |     |
|-----|------|-----|-------|------|-----|
| TCM | 1210 | G   | - 900 | - 2P | - T |
| (1) | (2)  | (3) | (4)   | (5)  | (6) |

- (1) Series name
- (2) Dimensions L×W
- (3) Product identification number
- (4) Impedance[at 100MHz]  
900: 90Ω
- (5) Number of line  
2P: 2-line
- (6) Packaging style  
T: ø180mm reel taping

### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



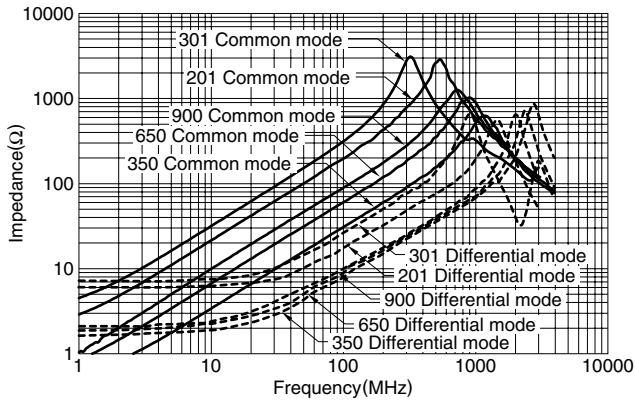
### ELECTRICAL CHARACTERISTICS

| Part No.        | Common mode impedance<br>(Ω) [100MHz] | DC resistance<br>(Ω)[1 line] | Rated current<br>I <sub>dc</sub> (A)max. | Rated voltage<br>E <sub>dc</sub> (V)max. | Insulation resistance<br>(MΩ)min. |
|-----------------|---------------------------------------|------------------------------|--|--|-----------------------------------|
| TCM1210G-350-2P | 35±30%                                | 0.70±30%                     | 0.10                                     | 10                                       | 10                                |
| TCM1210G-650-2P | 65±20%                                | 0.85±30%                     | 0.10                                     | 10                                       | 10                                |
| TCM1210G-900-2P | 90±20%                                | 1.20±30%                     | 0.10                                     | 10                                       | 10                                |
| TCM1210G-201-2P | 200±20%                               | 3.00±30%                     | 0.05                                     | 10                                       | 10                                |
| TCM1210G-301-2P | 300±20%                               | 3.50±30%                     | 0.05                                     | 10                                       | 10                                |

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



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