

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

Conformity to RoHS Directive

## TCM Series TCM1210 Type

### FEATURES

- The TCM series is compact sized common mode filter in industry.
- 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 TV, DVD player, notebook PCs, DVC, DSC, amusement machines, portable audio, digital cellular phones, etc.

### PRODUCT IDENTIFICATION

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

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

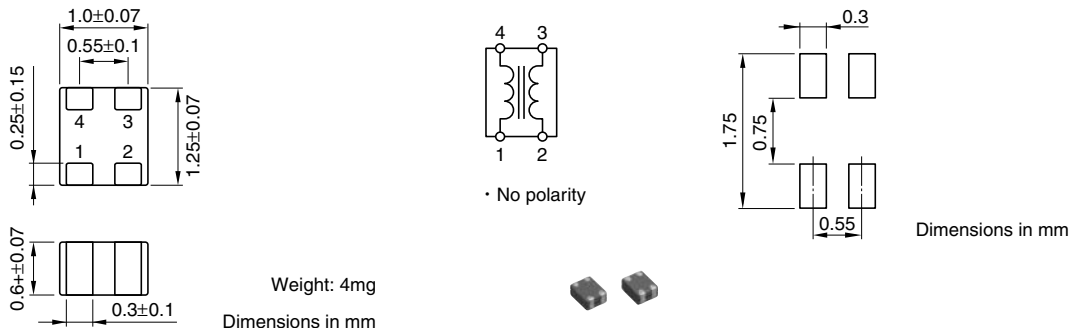
### TEMPERATURE RANGE

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

### PACKAGING STYLE AND QUANTITIES

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

### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAMS/RECOMMENDED PC BOARD PATTERNS



### ELECTRICAL CHARACTERISTICS

| Part No.       | Common mode impedance (Ω) [100MHz] | DC resistance (Ω)[1 line] | Rated current Idc(A)max. | Rated voltage Edc(V)max. | Insulation resistance (MΩ)min. |
|----------------|------------------------------------|---------------------------|--------------------------|--------------------------|--------------------------------|
| TCM1210-350-2P | 35±30%                             | 0.7±30%                   | 0.1                      | 10                       | 10                             |
| TCM1210-650-2P | 65±20%                             | 0.85±30%                  | 0.1                      | 10                       | 10                             |
| TCM1210-900-2P | 90±20%                             | 1.2±30%                   | 0.1                      | 10                       | 10                             |
| TCM1210-201-2P | 200±20%                            | 1.7±30%                   | 0.1                      | 10                       | 10                             |
| TCM1210-301-2P | 300±20%                            | 2.5±30%                   | 0.1                      | 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

