

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

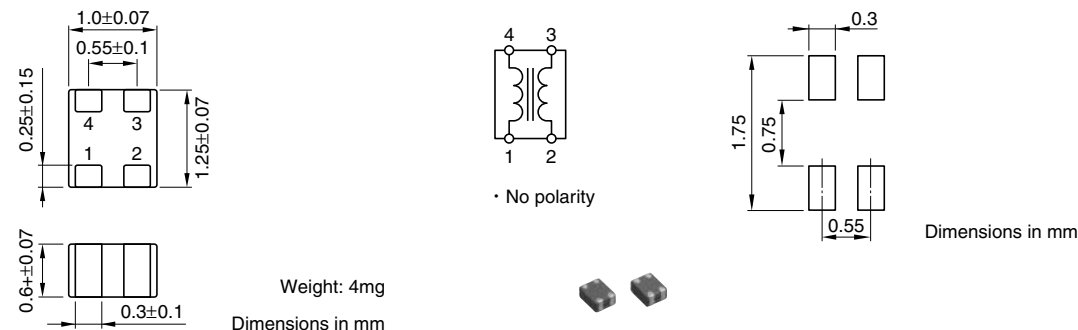
TEMPERATURE RANGE

| | |
|-----------|--------------|
| 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

