#### **公TDK**

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

**Conformity to RoHS Directive** 

### TCM Series TCM1005 Type

#### **FEATURES**

- TCM 1005 (L1.0×W0.5×T0.4mm) type is specially the smallest thin product in the industry.
- By providing wide bandwidth (cutoff frequency: 3GHz) for differential mode, this product has almost no effect for highspeed 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

T	CM	1005	-	900	-	2P	-	Т
(	1)	(2)		(3)		(4)		(5)

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

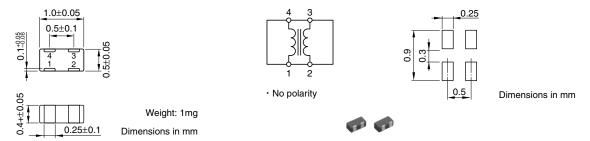
#### **TEMPERATURE RANGE**

Operating	−25 to +85°C
Operating	-23 to +03 C

#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	10000 pieces/reel

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



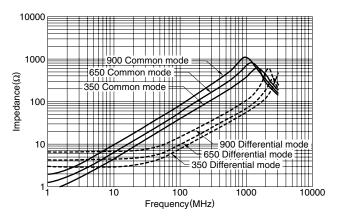
#### **ELECTRICAL CHARACTERISTICS**

Part No.	Common mode impedance $(\Omega)$ [100MHz]	DC resistance $(Ω)[1 \text{ line}]$	Rated current Idc(A)max.	Rated voltage Edc(V)max.	Insulation resistance $(M\Omega)$ min.
TCM1005-350-2P	35±30%	1.15±30%	0.1	5	10
TCM1005-650-2P	65±20%	2±30%	0.1	5	10
TCM1005-900-2P	90±20%	2.5±30%	0.1	5	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.



## TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



<sup>•</sup> All specifications are subject to change without notice.