Common Mode Filters

For ultra high-speed differential signal line
(Thunderbolt, SerialATA, USB3.0, etc.)

TCM series

Type: **TCM0806T** **[0302 inch]***

*** Dimensions Code [EIA]**

Issue date: August 2012

- All specifications are subject to change without notice.
- 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.

TDK

Common Mode Filters
For Ultra High-speed Differential Signal Line (Thunderbolt, SerialATA, USB3.0, etc.)

Conformity to RoHS Directive

TCM Series TCM0806T

FEATURES

- Thin-film common mode filter with a wide bandwidth for high-speed differential signal interfaces such as Thunderbolt, SerialATA and USB 3.0 .
- The series suppresses radiation noise due to common mode noise, without affecting the transmission of high-speed differential signals by realizing a higher cutoff frequency.
- This product contains no lead and supports lead-free soldering.

APPLICATIONS

- High speed interface(Thunderbolt, SerialATA and USB3.0, etc.) in electronics devices.

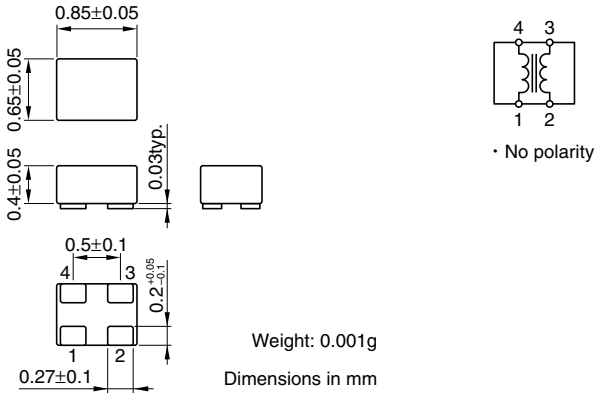
TEMPERATURE RANGES

Operating	–25 to +85°C
Storage(After mount)	–25 to +85°C

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 pieces/reel

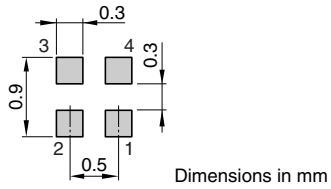
SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



Weight: 0.001g

Dimensions in mm

RECOMMENDED PC BOARD PATTERN



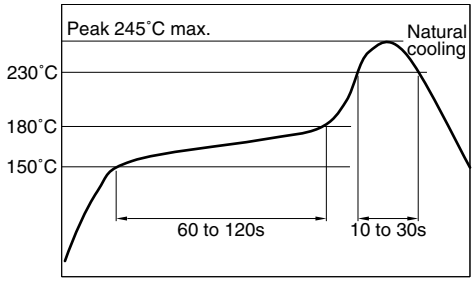
Dimensions in mm

PRODUCT IDENTIFICATION

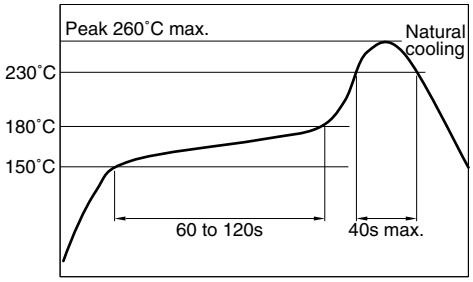
TCM	0806	T	-	060	-	2P	-	T
(1)	(2)	(3)		(4)		(5)		(6)

(1) Series name
(2) Dimensions L×W
(3) Product identification number
(4) Impedance[at 100MHz]
060: 06Ω
(5) Number of line
2P: 2-line
(6) Packaging style
T: ø180mm reel taping

RECOMMENDED SOLDERING CONDITIONS
RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE



- 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.

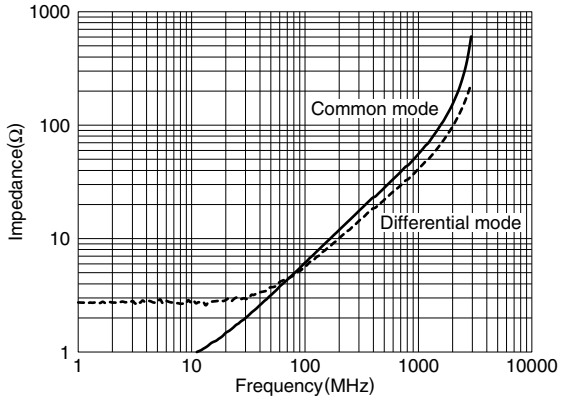
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ELECTRICAL CHARACTERISTICS

Part No.	Common mode impedance (Ω)typ.[at 100MHz]	DC resistance (Ω)typ. [1 line]	Cutoff frequency (GHz)typ.	Rated current Idc (A)max.	Rated voltage Edc (V)max.	Insulation resistance (MΩ)min.
TCM0806T-060-2P	6	1.4	10	0.1	10	10

TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS



INSERTION LOSS vs. FREQUENCY CHARACTERISTICS

