

# Common Mode Filters(SMD) For HDMI/S-ATA

Conformity to RoHS Directive

## TCM Series TCM2010H Type

### FEATURES

- TCM2010H is thin film common mode filter array type developed for high speed differential signal interfaces, such as HDMI™, S-ATA.
- TCM2010H is the product which constructed with two circuits in a small one chip of L2.0×W1.0mm.
- TCM2010H suppress the radiated emission without the distortion of differential signal.
- The cut-off frequency of TCM2010H for differential signal mode is 6GHz, so this couldn't interfere higher-speed differential signals such as HDMI™, S-ATA.

### APPLICATIONS

HDMI™, S-ATA etc.

### TEMPERATURE RANGE

Operating	-25 to +85°C
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### PACKAGING STYLE AND QUANTITIES

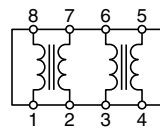
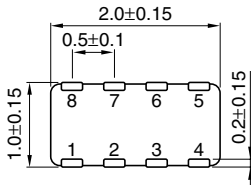
Packaging style	Quantity
Taping	4000 pieces/reel

### PRODUCT IDENTIFICATION

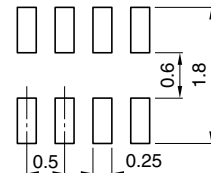
TCM	2010	H	-	900	-	4P	-	T	□□□
(1)	(2)	(3)	(4)	(5)	(6)	(7)			

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

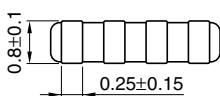
### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



• No polarity



Dimensions in mm



Weight: 8mg  
Dimensions in mm



### ELECTRICAL CHARACTERISTICS

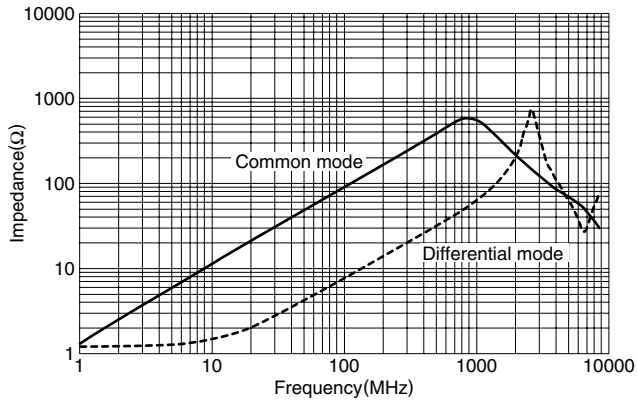
Part No.	Common mode impedance (Ω) [at 100MHz]	Cut-off frequency (GHz)	DC resistance (Ω)max. [1 line]	Rated current Idc (mA)max.	Rated voltage Edc (V)max.	Insulation resistance (MΩ)min.
TCM2010H-900-2P	90±25	6typ.	1	100	10	10

- HDMI™ is trademark of HDMI Licensing, LLC.

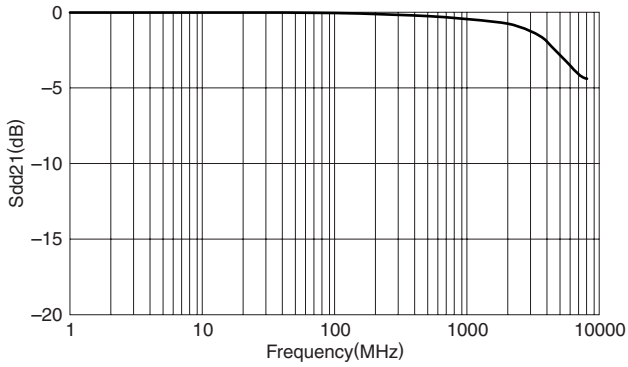
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

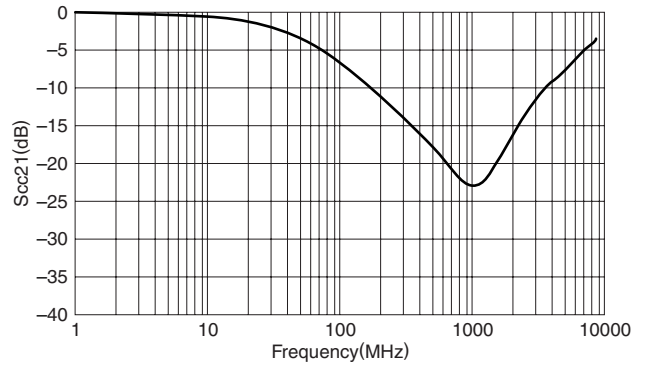
### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### INSERTION LOSS vs. FREQUENCY CHARACTERISTICS DIFFERENTIAL MODE



### COMMON MODE



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