

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

Conformity to RoHS Directive

TCM Series TCM1210H Type

FEATURES

- TCM1210H is thin-film broad band common-mode filter which developed for high-speed differential signal interface such as HDMITM, S-ATA.
- TCM1210H exercises suppression effect of radiated noise without generating distortion in signal because it realized a broad band of differential mode transmission.
- The differential mode cut-off frequency is 6.0GHz.
 Therefore, it hardly interferes for high-speed differential signal such as HDMITM, S-ATA.

APPLICATIONS

- EMI countermeasures of interface-HDMI™ of digital image equipment such as digital TVs, DVD recorders.
- EMI countermeasures of high-speed differential signal interface such as image signal interface S-ATA adopted to personal computers

PRODUCT IDENTIFICATION

TCM	1210	Н -	900	- 2P	- T	
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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

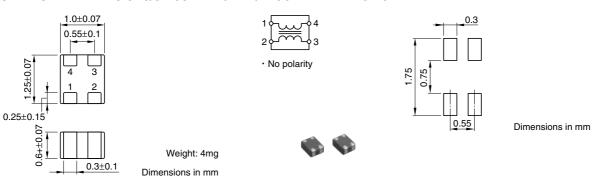
TEMPERATURE RANGE

Operating	−25 to +85°C

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



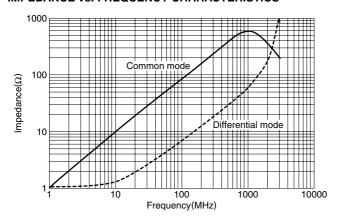
ELECTRICAL CHARACTERISTICS

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 $(M\Omega)$ min.
TCM1210H-900-2P	90±25	6typ.	0.85	100	10	10

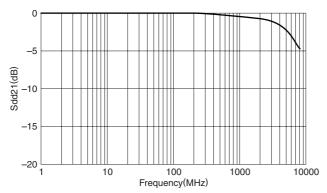
- HDMI™ is trademark of HDMI Licensing, LLC.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



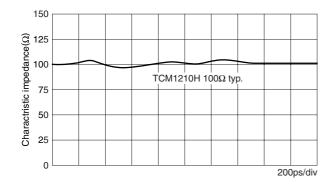
TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



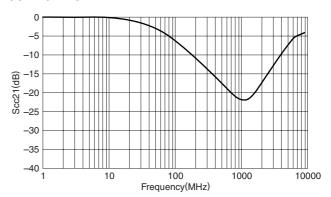
INSERTION LOSS vs. FREQUENCY CHARACTERISTICS DIFFERENTIAL MODE



CHARACTERISTIC IMPEDANCE MEASURED ACCORDING TO TDR



COMMON MODE



[•] All specifications are subject to change without notice.