

Common Mode Filters(SMD) For DVI / HDMI

Conformity to RoHS Directive

ACM-D/H Series ACM2012D/H Types

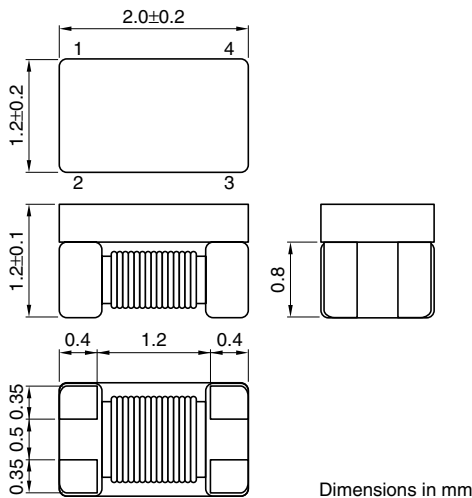
FEATURES

- These are a series of broadband common mode filters developed for high-speed differential signal interfaces, such as DVI and HDMI™.
- The cutoff frequencies in differential mode for ACM2012D and ACM2012H are 3.5GHz and 6.0GHz respectively, so they do not interfere with high-speed differential signals.
- The characteristic impedance is approximated to 100Ω, conforming to the TDR standard for HDMI™.

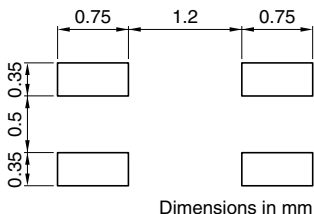
APPLICATIONS

- For new HDMI™ interfaces used in digital video devices: ACM2012H is suited for use on the transmission side (Source) of digital TVs, DVD recorders and liquid crystal projectors. ACM2012D is suited for use on the receiving side (Sink).
- For digital video signal interfaces DVI (UXGA) used in PCs and other devices/High-speed differential signal interfaces for USB 2.0, IEEE1394 and Serial-ATA.

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



PRODUCT IDENTIFICATION

ACM	2012	D -	900 -	2P -	T	□□
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series name
- (2) Dimensions L×W
2012: 2.0×1.2mm
- (3) Product identification number (D or H)
- (4) Impedance[at 100MHz]
900: 90Ω
- (5) Number of line
2P: 2-line
- (6) Packaging style
T: ø180mm reel taping
TL: ø330mm reel taping
B: Bulk
- (7) TDK internal code

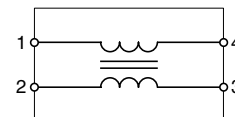
TEMPERATURE RANGE

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

Packaging style	Reel	Quantity
Taping	ø180mm	2000 pieces/reel
	ø330mm	10000 pieces/reel

CIRCUIT DIAGRAM



• No polarity

• 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.

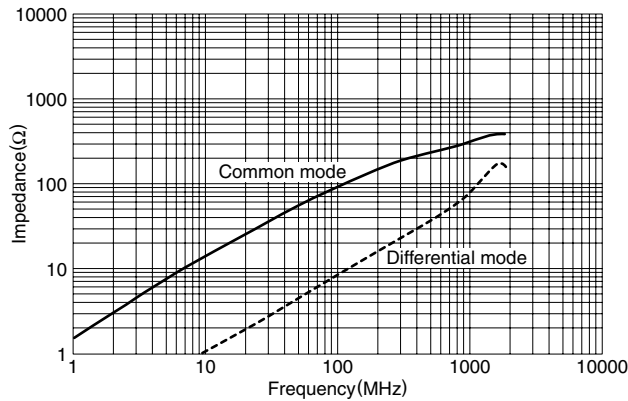
ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω) [at 100MHz]	DC resistance (Ω) [1 line]	Rated current I_{dc} (mA)	Rated voltage E_{dc} (V)	Insulation resistance (M Ω)	Cut-off frequency (GHz)	Characteristic impedance (Ω)
ACM2012D-900-2P	65min.(90typ.)	0.30max.	300max.	20max.	10min.	3.5typ.	100typ.
ACM2012H-900-2P	65min.(90typ.)	0.30max.	300max.	20max.	10min.	6typ.	100typ.

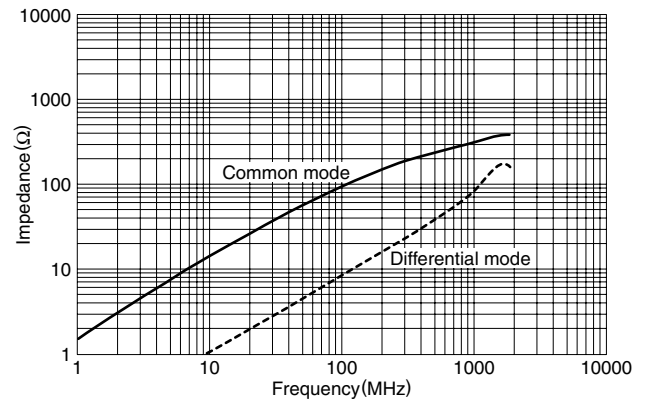
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS(REFERENCE)

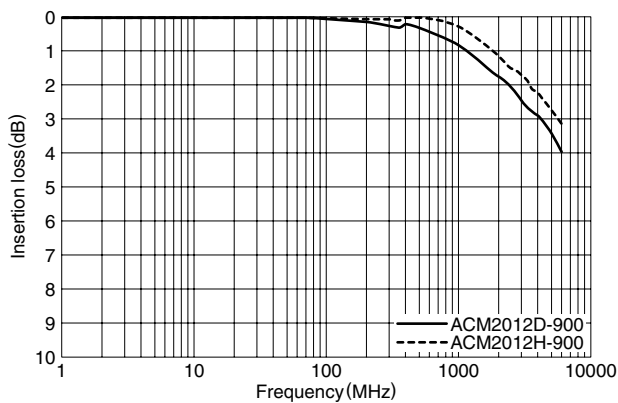
ACM2012D-900-2P



ACM2012H-900-2P



INSERTION LOSS vs. FREQUENCY CHARACTERISTICS (REFERENCE)



CHARACTERISTIC IMPEDANCE MEASURED ACCORDING TO TDR(REFERENCE)

