

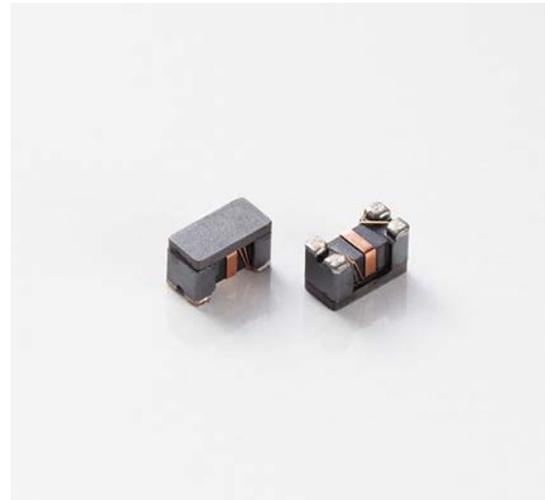
## *EMI SUPPRESSION FILTER / ATCM (for HDMI) Series*

### • Features

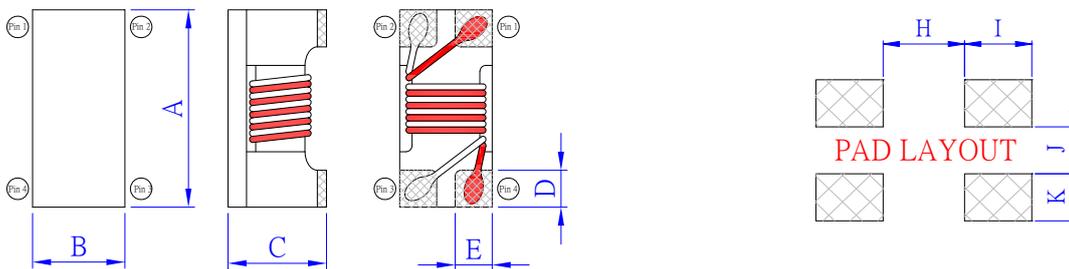
1. These are a series of broadband common mode filters developed for high-speed differential signal interface, such as DVI and HDMI.
2. The cutoff frequencies in differential mode for ATCM2012DB and ATCM2012HB are 3.5 GHz and 6.0GHz respectively, so it don't interfere with high-speed differential signals.
3. The characteristic impedance is approximated to 100Ω conforming to the TDR standard for HDMI.

### • Applications

1. For new HDMI interfaces used in digital video devices:  
 ATCM2012HB is suited for use on the transmission side (Source) of digital TVs, DVD recorders and liquid crystal projectors.  
 ATCM2012DB is suited for use on the receiving side (Sink).
2. For digital video signal interfaces DVI (UXGA) used in PCs and other devices/High-speed differential signal interfaces for USB 3.0, IEEE 1394 and Serial-ATA.

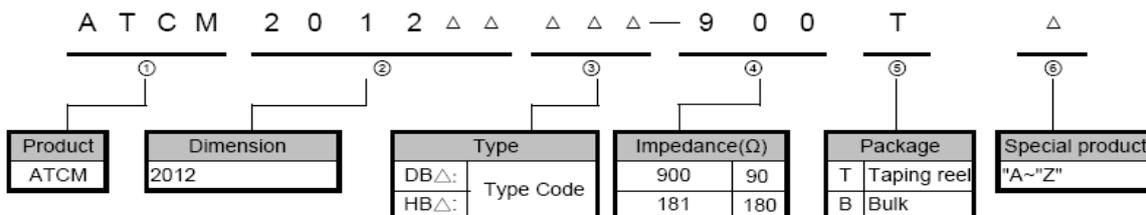


### • Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (Ref.)	I (Ref.)	J (Ref.)	K (Ref.)
ATCM2012DB	2.0 ± 0.2	1.2 ± 0.2	1.2 ± 0.2	0.45 Typ.	0.4 Typ.	0.8	0.9	0.4	0.4
ATCM2012HB	2.0 ± 0.2	1.2 ± 0.2	1.2 ± 0.2	0.45 Typ.	0.4 Typ.	0.8	0.9	0.4	0.4

#### ■ PRODUCT IDENTIFICATION



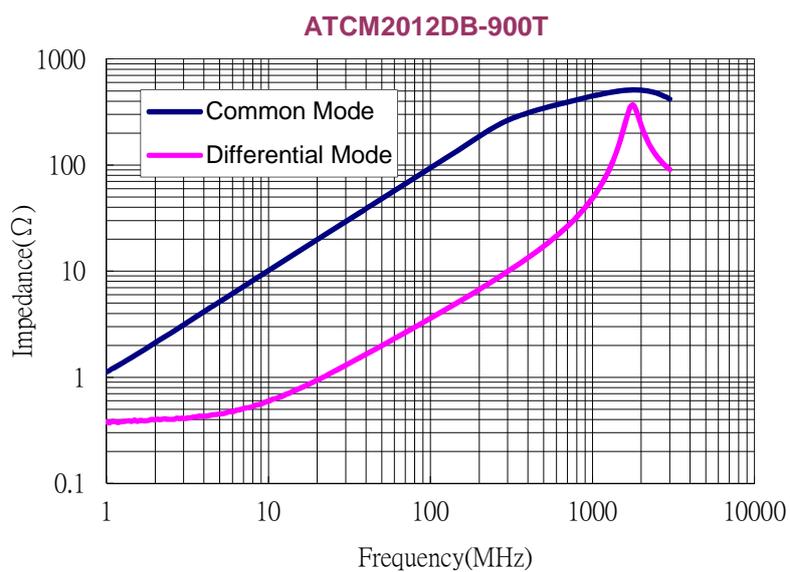
## ◆ ATCM2012DB Series Specification :

Part Number	Common-Mode Impedance ( $\Omega$ )	Test Freq. (MHz)	DCR Max. ( $\Omega$ )	Rated Current (mA) Max.	Rated Voltage (V)	Cut-off Frequency (GHz)	Insulation Resistance ( $M\Omega$ ) Min.
ATCM2012DB-900T	$90 \pm 25\%$	100	0.30	300	20	3.5 typ.	10

### NOTE :

- \* The operating temperature range is  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- \* Tolerance :  $\pm 25\%$

### ■ Typical Impedance v.s. Frequency Curve



## ◆ ATCM2012HB Series Specification :

Part Number	Common-Mode Impedance ( $\Omega$ )	Test Freq. (MHz)	DCR Max. ( $\Omega$ )	Rated Current (mA) Max.	Rated Voltage (V)	Cut-off Frequency (GHz)	Insulation Resistance ( $M\Omega$ ) Min.
ATCM2012HB-900T	65 Min. (90 typ.)	100	0.30	300	20	6.0 typ.	10

### NOTE :

- \* The operating temperature range is  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- \* Tolerance :  $\pm 25\%$

### ■ Typical Impedance v.s. Frequency Curve

