



# Common Mode Filters For Automobile Signal Line

## ACM Series ACM2012

### FEATURES

- Reliability is achieved at the temperature range of  $-40$  to  $+105^{\circ}\text{C}$ .
- Impedance variation: 4 types of impedance values are prepared to correspond to the various applications.
- Effective for common mode EMI: It can suppress the common mode EMI without waveform distortion.
- Lead-free soldering is available.

### APPLICATIONS

Radiation noise suppression for Car-Multimedia interface (MOST, USB2.0, IDB-1394, etc.)

### TEMPERATURE RANGES

Operating	$-40$ to $+105^{\circ}\text{C}$
Storage(After mount)	$-40$ to $+105^{\circ}\text{C}$

### PACKAGING STYLE AND QUANTITIES

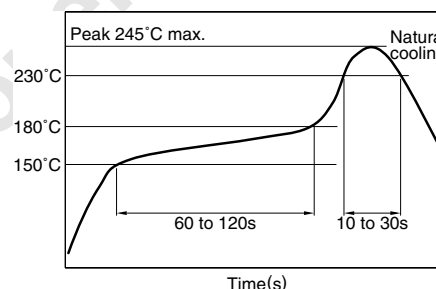
Packaging style	Reel	Quantity
Taping	$\phi 180\text{mm}$	2000 pieces/reel
	$\phi 330\text{mm}$	10000 pieces/reel

### PRODUCT IDENTIFICATION

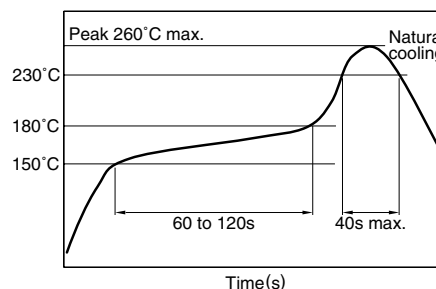
ACM	2012	-	361	-	2P	-	T	001
(1)	(2)	(3)	(4)	(5)	(6)			

- (1) Series name
- (2) Dimensions L×W
- (3) Impedance[at 100MHz]  
900:  $90\Omega$
- (4) Number of line  
2P: 2-line
- (5) Packaging style  
T:  $\phi 180\text{mm}$  reel taping  
TL:  $\phi 330\text{mm}$  reel taping
- (6) TDK internal code

### RECOMMENDED SOLDERING CONDITIONS RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



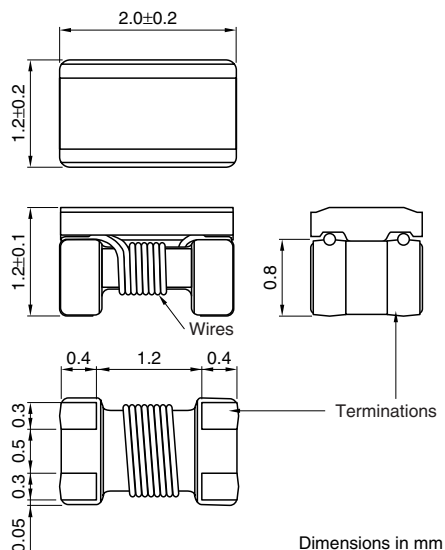
### REFLOW PROFILE FOR SOLDER HEAT RESISTANCE



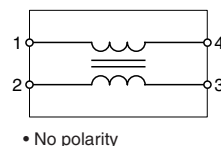
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

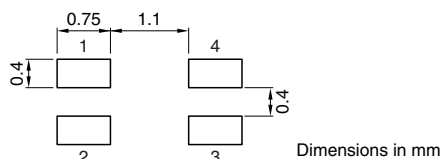
**SHAPES AND DIMENSIONS**



**CIRCUIT DIAGRAM**



**RECOMMENDED PC BOARD PATTERN**



• These products are only for reflow soldering.

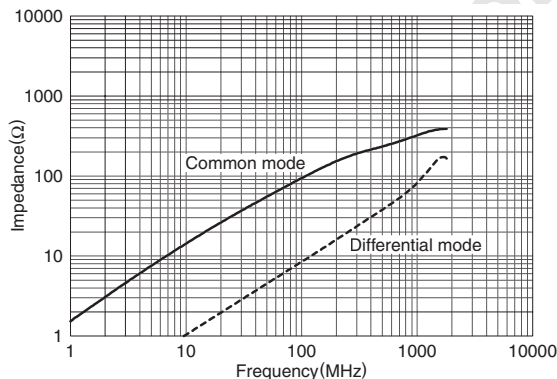
**ELECTRICAL CHARACTERISTICS**

Part No.	Common mode Impedance (Ω)[at 100MHz]		DC resistance (Ω)max. [1 line]	Rated current (mA)max.	Rated voltage (V)max.
	typ.	min.			
ACM2012-900-2P-T001	90	65	0.19	400	50
ACM2012-121-2P-T001	120	90	0.22	370	50
ACM2012-201-2P-T001	200	150	0.25	350	50
ACM2012-361-2P-T001	360	270	0.50	220	50

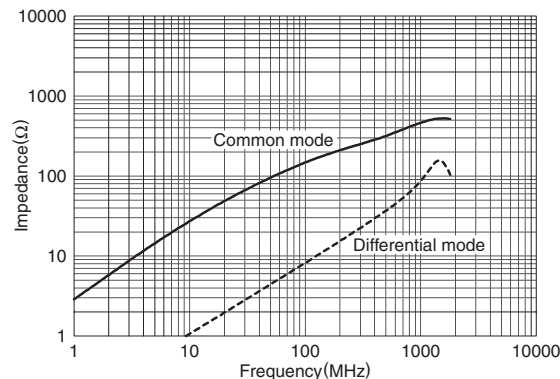
• Operating temperature range: -40 to +105°C

**TYPICAL ELECTRICAL CHARACTERISTICS  
IMPEDANCE vs. FREQUENCY CHARACTERISTICS**

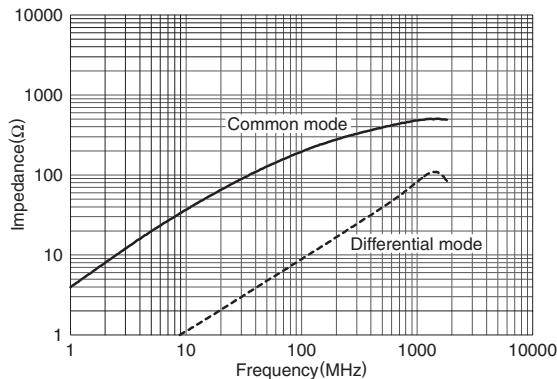
**ACM2012-900-2P**



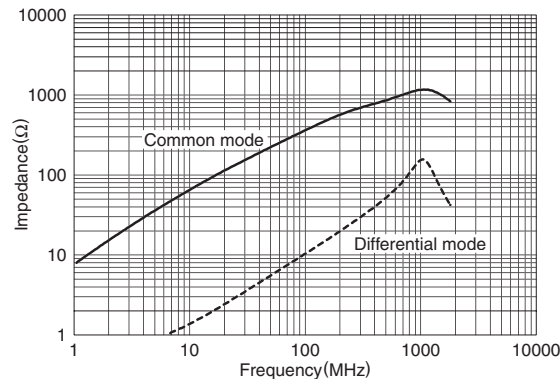
**ACM2012-121-2P**



**ACM2012-201-2P**



**ACM2012-361-2P**



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