

Common Mode Filters(SMD)

For power line of automotive ECU

ACM-V series

Type: **ACM70V**
 ACM90V
 ACM12V

Issue date: December 2010

- All specifications are subject to change without notice.
 - 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.
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Common Mode Filters(SMD) For Power Line

Conformity to RoHS Directive

ACM-V Series

FEATURES

- Have achieved miniaturization while keeping characteristics by adoption of exclusive square type closed magnetic cores.
- Due to the low profile design, it is suitable for a surface mount.
- High impedance characteristic has been achieved a superior effect for common mode noise suppression.
- This products have serialized a large current product up to 8A corresponding for various DC power lines.
- Operating temperature range has covered widely from -40 to $+125^{\circ}\text{C}$.

APPLICATIONS

Common mode noise countermeasures for DC power lines of electronic control equipment, multi-media equipment for automobiles and various electronic equipment power supply lines.

PACKAGING STYLE AND QUANTITIES

Packaging style	Type	Quantity
Taping	ACM70V	1500 pieces/reel
	ACM90V	800 pieces/reel
	ACM12V	500 pieces/reel

PRODUCT IDENTIFICATION

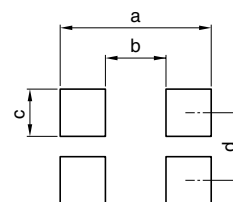
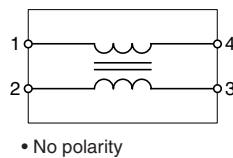
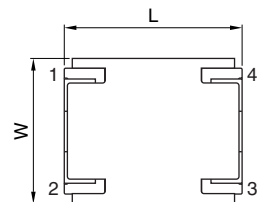
ACM	90V	- 701	- 2PL	- TL	- □□
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
 (2) Dimensional code
 (3) Impedance [at 100MHz]
 701: 700Ω
 (4) Numbers of lines
 2PL: 2 lines
 (5) Packaging style
 TL: $\phi 330\text{mm}$ reel taping
 (6) TDK internal code

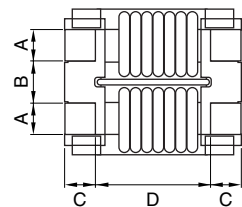
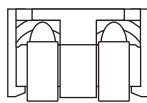
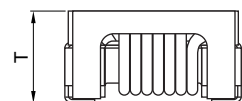
TEMPERATURE RANGE

Operating	-40 to $+125^{\circ}\text{C}$
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SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



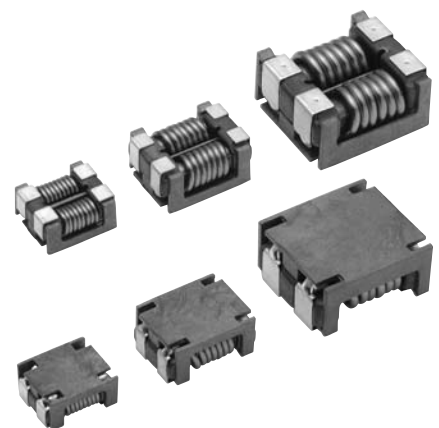
Dimensions in mm



Coplanarity: 0.1max.
 Dimensions in mm

Type	a	b	c	d
ACM70V	9.0	4.0	1.5	3.0
ACM90V	11.0	6.0	1.5	3.5
ACM12V	14.0	7.4	2.7	5.2

Type	L	W	T	A	B	C	D	Weight
ACM70V	7.0 ± 0.2	6.0 ± 0.2	3.5max.	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	4.0typ.	0.35g
ACM90V	9.0 ± 0.2	7.0 ± 0.2	4.5max.	1.5 ± 0.2	2.0 ± 0.2	1.5 ± 0.2	6.0typ.	0.82g
ACM12V	12.0 ± 0.3	11.0 ± 0.3	6.0max.	2.7 ± 0.2	2.5 ± 0.2	2.3 ± 0.2	7.4typ.	2.30g



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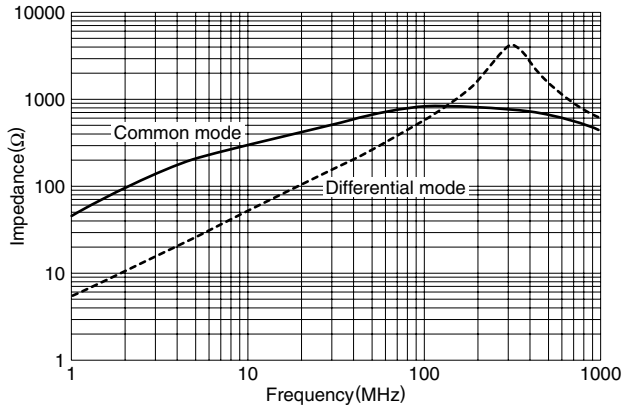
ELECTRICAL CHARACTERISTICS

Part No.	Common mode impedance (Ω) typ.[at 100MHz]	DC resistance ($m\Omega$) max.	Rated current I_{dc} (A) max.	Rated voltage E_{dc} (V) max.	Insulation resistance ($M\Omega$) min.
ACM70V-701-2PL-TL	700	15	4.0	80	10
ACM90V-701-2PL-TL	700	10	5.0	80	10
ACM12V-701-2PL-TL	700	6	8.0	80	10

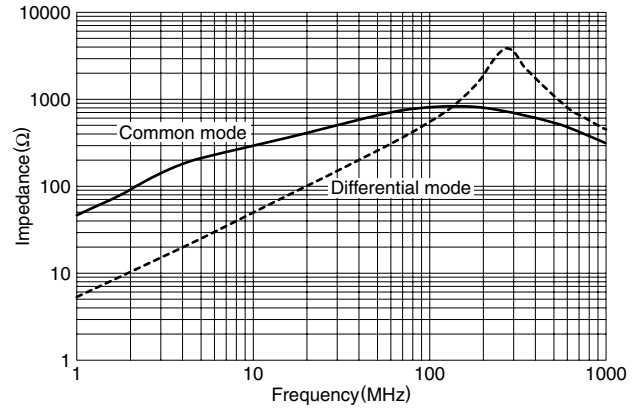
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ACM70V-701-2PL



ACM90V-701-2PL



ACM12V-701-2PL

