

Common Mode Filters

For power line

ACM series

Type: ACM4520 [1808 inch]*

ACM7060 [2824 inch] ACM9070 [3628 inch] ACM1211 [4844 inch] ACM1513 [6052 inch]

* Dimensions Code [EIA]

Issue date: March 2013

[•] 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.

&TDK

Common Mode Filters For Power Line

Conformity to RoHS Directive

ACM Series ACM4520

FEATURES

- Several large current products are prepared to correspond to the various applications.
- Low profile and compact shape, it is suited for surface mounting.
- It shows high common mode impedance despite of its compact shape.

APPLICATIONS

Radiation noise suppression for power line (DVC, DVD cam, DSC, etc.)

TEMPERATURE RANGES

Operating	–40 to +85°C	
Storage(After mount)	–40 to +85°C	

PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity	
Taping	ø180mm	800 pieces/reel	
	ø330mm	2500 pieces/reel	

PRODUCT IDENTIFICATION

ACM	4520	- 901 -	2P	- T -	
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
- (2) Dimensions W×T 4520: 4.5×2.0mm
- (3) Impedance [at 100MHz]

901: 900Ω

(4) Numbers of lines

2P: 2-line

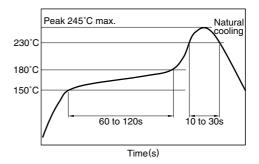
(5) Packaging style

T: ø180mm reel taping

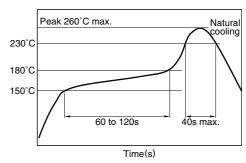
TL: ø330mm reel taping

(6) TDK internal code

RECOMMENDED SOLDERING CONDITIONS RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



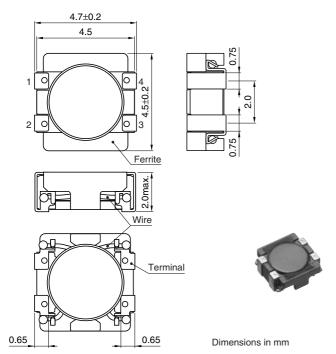
REFLOW PROFILE FOR SOLDER HEAT RESISTANCE



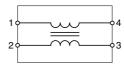
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SHAPES AND DIMENSIONS

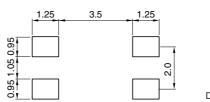


CIRCUIT DIAGRAM



• No polarity

RECOMMENDED PC BOARD PATTERN



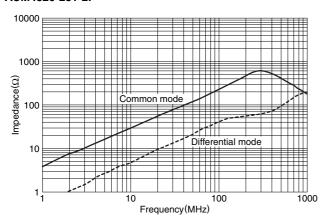
Dimensions in mm

ELECTRICAL CHARACTERISTICS

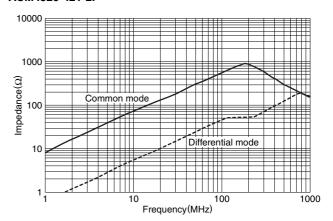
Part No.	Common mode impedance (Ω) [at 100MHz]		DC resistance (Ω)max. (A)max. (A)max.		Idc		Insulation resistance $(M\Omega)$ min.
	min.	typ.	[1 lille]	60°C	85°C	—— (V)max.	(10122)111111.
ACM4520-231-2P	180	230	0.05	3.0	2.6	50	10
ACM4520-421-2P	300	420	0.055	2.8	2.4	50	10
ACM4520-901-2P	650	900	0.06	2.3	2.0	50	10
ACM4520-142-2P	1000	1400	0.08	1.7	1.5	50	10



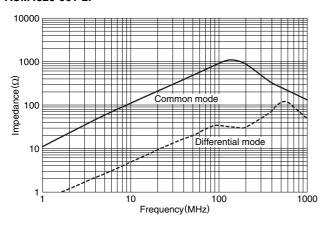
TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS ACM4520-231-2P



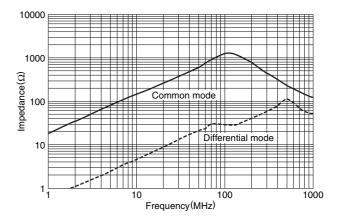
ACM4520-421-2P



ACM4520-901-2P



ACM4520-142-2P



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Common Mode Filters For Power Line

Conformity to RoHS Directive

ACM Series ACM7060, 9070, 1211, 1513

FEATURES

- A chip-type common mode filter for large current applications. Common mode impedance surpasses 300 to 1000Ω at 100MHz. Noise is greatly suppressed.
- Capable of handling the highest current (up to 10A) of any chiptype common mode filter.
- Height and size have been considered, resulting in a compact and light-weight choke coil. Applicable for the miniaturization required to reduce the size and weight of portable equipment.
- The products contain no lead and also support lead-free soldering.
- This product does not contain regulated substances that are slated to be included in RoHS.

APPLICATIONS

Used for power line noise suppression for any electronic devices Used to counter adapter/battery line noise for relatively large electronic devices such as notebook PCs, stand-alone word processors, etc

TEMPERATURE RANGES

Operating	−40 to +85°C	
Storage(After mount)	–40 to +85°C	

PACKAGING STYLE AND QUANTITIES

Packaging style	Туре	Reel	Quantity
	ACM7060	ø330mm	1500 pieces/reel
Taping	ACM9070	ø330mm	800 pieces/reel
Taping	ACM1211	ø330mm	500 pieces/reel
	ACM1513	ø330mm	500 pieces/reel

PRODUCT IDENTIFICATION

ACM	7060 -	701	- 2PL	- TL	
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series
- (2) Dimensions L×W 7060: 7.0×6.0mm
- (3) Impedance[at 100MHz]

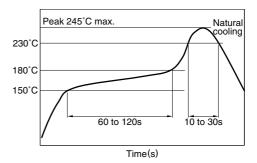
701: 700Ω (4) Number of lines

2PL: 2-line (5) Packaging style

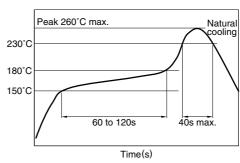
T: Ø180mm reel taping TL: Ø330mm reel taping

(6) TDK internal code

RECOMMENDED SOLDERING CONDITIONS RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE

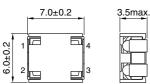


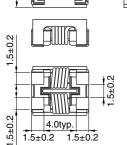
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



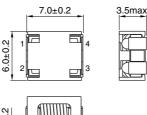
SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN(REFLOW SOLDERING) ACM7060 TYPE

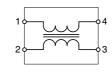
ACM7060-301-2PL-TL01

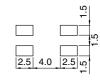




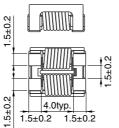
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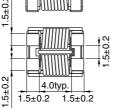






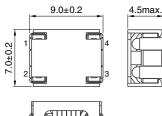
Dimensions in mm

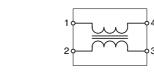


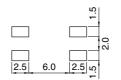




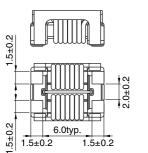
ACM9070 TYPE ACM9070-701-2PL-TL01







Dimensions in mm







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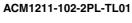
SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN(REFLOW SOLDERING) ACM1211 TYPE

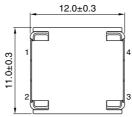
ACM1211-701-2PL-TL01

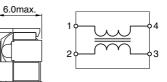
11.0±0.3

12.0±0.3

6.0max.

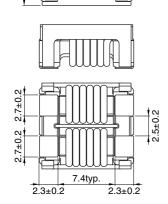


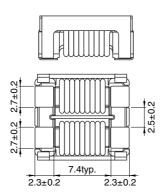






Dimensions in mm

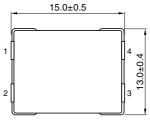


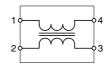


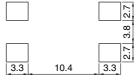




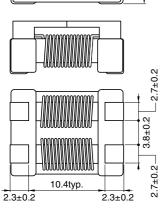
ACM1513 TYPE

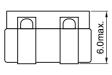






Dimensions in mm





Weight: 3.15g
Dimensions in mm



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ELECTRICAL CHARACTERISTICS

•	Impedance (Ω)[at 100		DC resistance —— (mΩ)max.	Rated current Idc(A)max.	Insulation resistance $(M\Omega)$ min.	Rated voltage Edc(V)max.
	min.	typ.	(IIIsz)IIIax.	iuc(A)iiiax.		Luc(v)max.
ACM7060-301-2PL-TL01	225	300	10	5	10	80
ACM7060-701-2PL-TL01	500	700	15	4	10	80
ACM9070-701-2PL-TL01	500	700	10	5	10	80
ACM1211-701-2PL-TL01	500	700	6	8	10	80
ACM1211-102-2PL-TL01	750	1000	14	6	10	80
ACM1513-551-2PL-TLHF	450	550	4	10	10	50

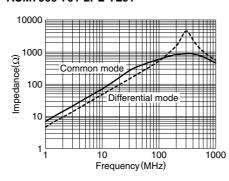
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

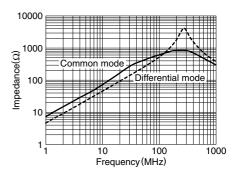
ACM7060-301-2PL-TL01

10000 Common mode 100 Differential mode 1000 Frequency (MHz)

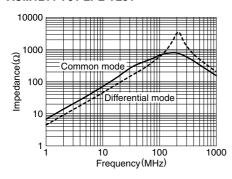
ACM7060-701-2PL-TL01



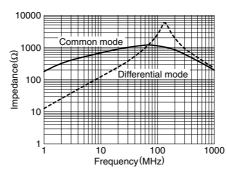
ACM9070-701-2PL-TL01



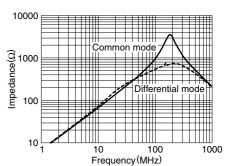
ACM1211-701-2PL-TL01



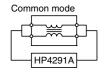
ACM1211-102-2PL-TL01



ACM1513-551-2PL-TLHF



MEASURING CIRCUITS





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