

Common Mode Filters(SMD)

For power line

ACM series

| | | |
|----------------------------|---------|--------------|
| Type: | ACM4520 | [1808 inch]* |
| | ACM3225 | [1210 inch] |
| | ACM4532 | [1812 inch] |
| | ACM7060 | [2824 inch] |
| | ACM9070 | [3628 inch] |
| | ACM1211 | [4844 inch] |
| | ACM1513 | [6052 inch] |
| * Dimensions Code JIS[EIA] | | |

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.

Common Mode Filters(SMD) For Power Line

Conformity to RoHS Directive

ACM Series ACM4520 Type

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 RANGE

| | |
|-----------|--------------|
| Operating | -40 to +85°C |
|-----------|--------------|

PACKAGING STYLE AND QUANTITIES

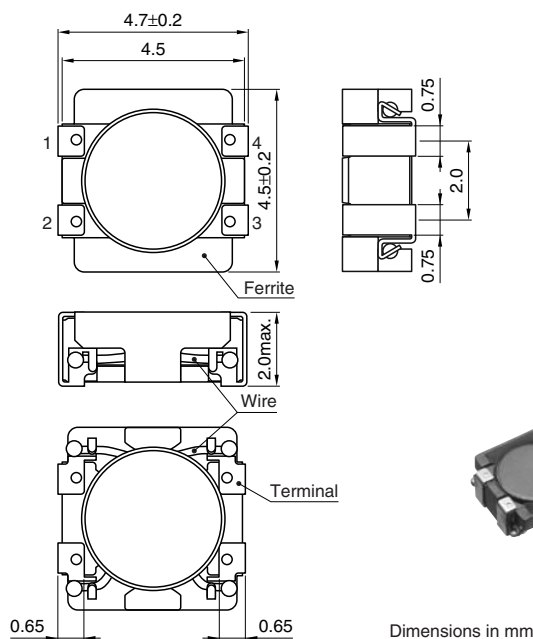
| Packaging style | Reel | Quantity |
|-----------------|--------|------------------|
| Taping | ø180mm | 800 pieces/reel |
| | ø330mm | 2500 pieces/reel |

PRODUCT IDENTIFICATION

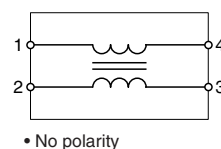
| | | | | | | | | | | | |
|-----|------|---|-----|---|-----|---|-----|---|--------------------------|--------------------------|--------------------------|
| ACM | 4520 | - | 901 | - | 2P | - | T | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (1) | (2) | | (3) | | (4) | | (5) | | (6) | | |

- (1) Series name
- (2) Dimensions W×T
4520: 4.5×2.0mm
- (3) Impedance [at 100MHz]
901: 900Ω
142: 1400Ω
- (4) Numbers of lines
2P: 2-line
- (5) Packaging style
T: ø180mm reel taping
TL: ø330mm reel taping
B: Bulk
- (6) TDK internal code

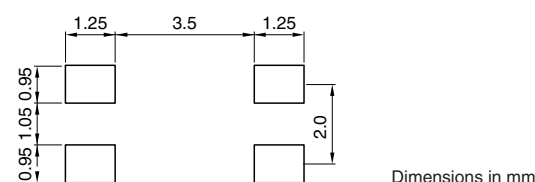
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERN



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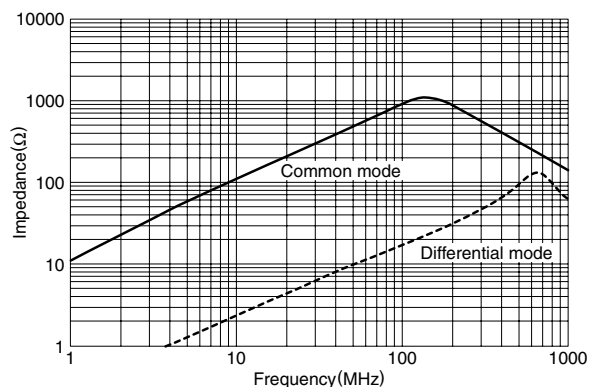
ELECTRICAL CHARACTERISTICS

| Part No. | Common mode impedance (Ω) [at 100MHz] | | DC resistance (Ω) max. [1 line] | Rated current I_{dc} (A) max. | Rated voltage E_{dc} (V) max. | Insulation resistance ($M\Omega$) min. |
|----------------|--|------|--|---------------------------------|---------------------------------|--|
| | min. | typ. | | | | |
| ACM4520-901-2P | 650 | 900 | 0.06 | 2.0 | 50 | 10 |
| ACM4520-142-2P | 1000 | 1400 | 0.08 | 1.5 | 50 | 10 |

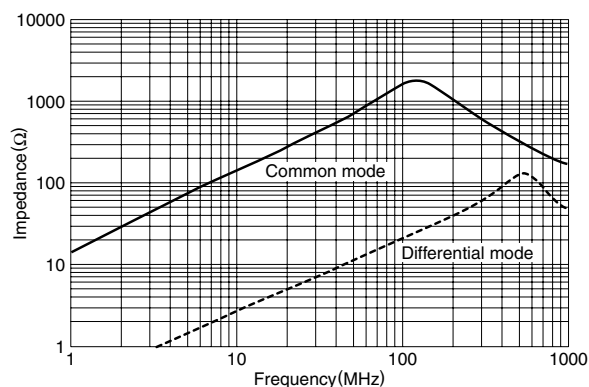
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ACM4520-901-2P



ACM4520-142-2P



Common Mode Filters(SMD) For Power Line

Conformity to RoHS Directive

ACM Series ACM3225, 4532, 7060, 9070, 1211, 1513 Types

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 chip-type 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.

PRODUCT IDENTIFICATION

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

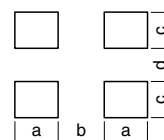
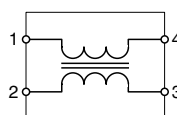
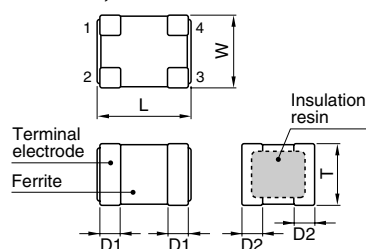
- (1) Series
(2) Dimensions L×W
7060: 7.0×6.0mm
(3) Impedance[at 100MHz]
701: 700Ω
(4) Number of lines
2PL: 2-line
(5) Packaging style
T: ø180mm reel taping
TL: ø330mm reel taping
(6) TDK internal code

TEMPERATURE RANGE

Operating -25 to +85°C

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

ACM3225, 4532 TYPES



Dimensions in mm

| Type | a | b | c | d |
|---------|-----|-----|------|-----|
| ACM3225 | 1.5 | 1.6 | 1.4 | 1.1 |
| ACM4532 | 1.8 | 2.3 | 1.75 | 1.1 |

Dimensions in mm

| Type | L | W | T | D1 | D2 |
|---------|---------|---------|----------|-----|-----|
| ACM3225 | 3.2±0.2 | 2.5±0.2 | 2.3 max. | 0.7 | 0.7 |
| ACM4532 | 4.5±0.2 | 3.2±0.2 | 3.0 max. | 1 | 1 |

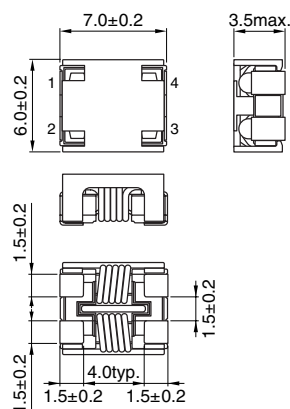
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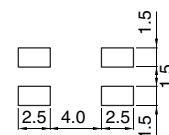
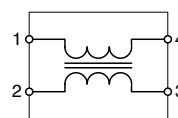
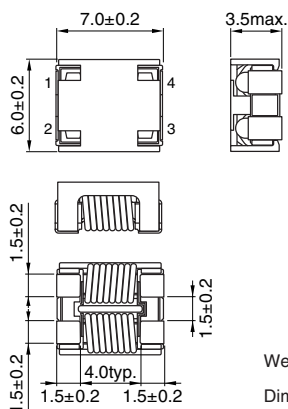
SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN(REFLOW SOLDERING)

ACM7060 TYPE

ACM7060-301-2PL-TL01



ACM7060-701-2PL-TL01

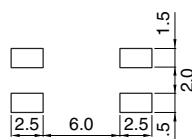
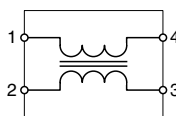
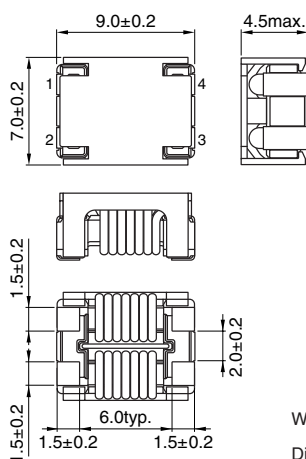


Dimensions in mm

Weight: 0.35g

Dimensions in mm

ACM9070 TYPE



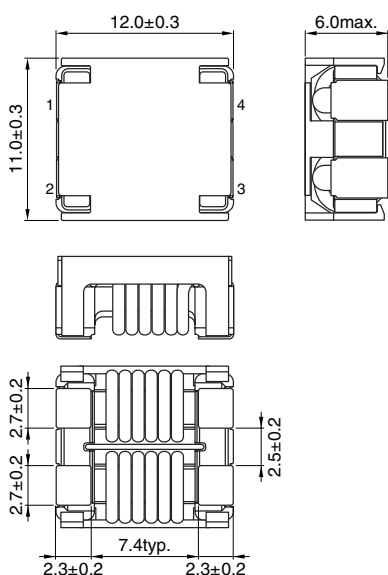
Dimensions in mm

Weight: 0.82g

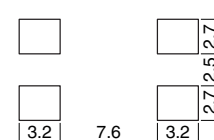
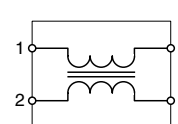
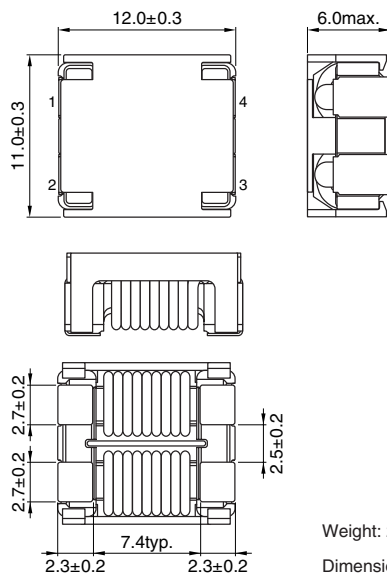
Dimensions in mm

ACM1211 TYPE

ACM1211-701-2PL-TL01



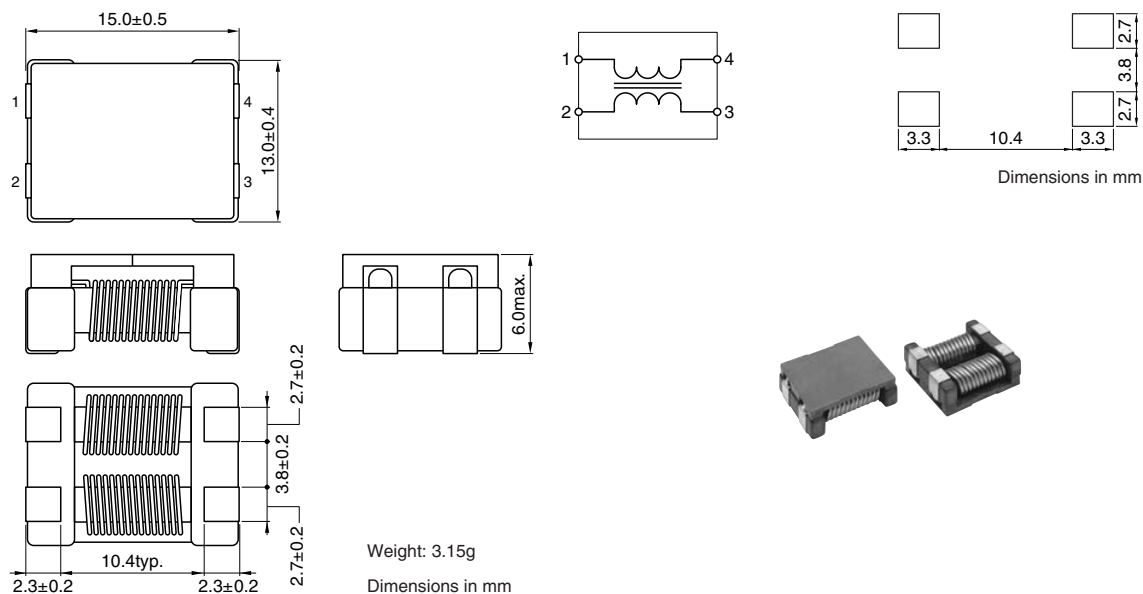
ACM1211-102-2PL-TL01



Dimensions in mm

Weight: 2.20g

Dimensions in mm

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN(REFLOW SOLDERING)
ACM1513 TYPE

ELECTRICAL CHARACTERISTICS

| Part No. | Impedance (Ω)[at 100MHz] | | DC resistance (m Ω)max. | Rated current Idc(A)max. | Insulation resistance (M Ω)min. | Rated voltage Edc(V)max. |
|-----------------|--------------------------------------|------|------------------------------------|-----------------------------|--|-----------------------------|
| | min. | typ. | | | | |
| ACM3225-601-2P | 450 | 600 | 200 | 1.0 | 10 | 50 |
| ACM4532-601-2P | 450 | 600 | 100 | 1.5 | 10 | 50 |
| ACM4532-801-2P | 600 | 800 | 100 | 1.0 | 10 | 50 |
| ACM7060-301-2PL | 225 | 300 | 10 | 5 | 10 | 80 |
| ACM7060-701-2PL | 500 | 700 | 15 | 4 | 10 | 80 |
| ACM9070-701-2PL | 500 | 700 | 10 | 5 | 10 | 80 |
| ACM1211-701-2PL | 500 | 700 | 6 | 8 | 10 | 80 |
| ACM1211-102-2PL | 750 | 1000 | 14 | 6 | 10 | 80 |
| ACM1513-551-2PL | 450 | 550 | 4 | 10 | 10 | 80 |

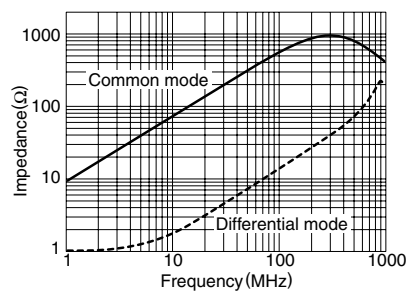
PACKAGING STYLE AND QUANTITIES

| Packaging style | Type | Reel | Quantity |
|-----------------|---------|--------------|------------------|
| Taping | ACM3225 | ϕ 180mm | 1000 pieces/reel |
| | | ϕ 330mm | 5000 pieces/reel |
| | ACM4532 | ϕ 180mm | 500 pieces/reel |
| | | ϕ 330mm | 2000 pieces/reel |
| | ACM7060 | ϕ 330mm | 1500 pieces/reel |
| | ACM9070 | ϕ 330mm | 800 pieces/reel |
| | ACM1211 | ϕ 330mm | 500 pieces/reel |
| | ACM1513 | ϕ 330mm | 500 pieces/reel |

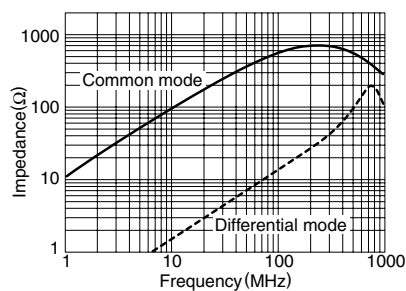
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

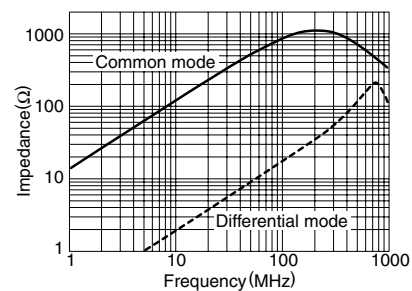
ACM3225-601-2P



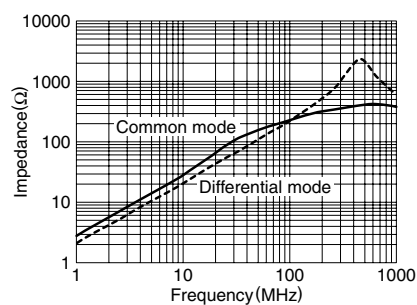
ACM4532-601-2P



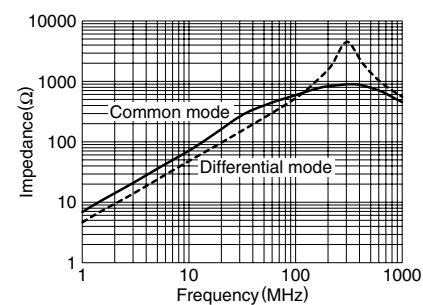
ACM4532-801-2P



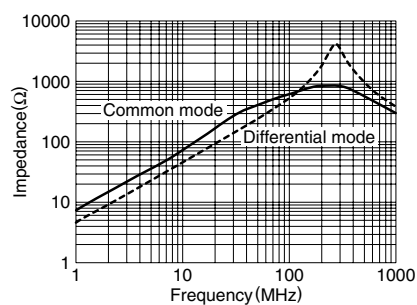
ACM7060-301-2PL



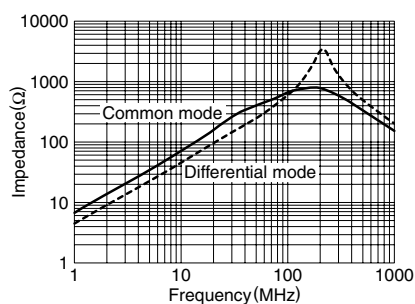
ACM7060-701-2PL



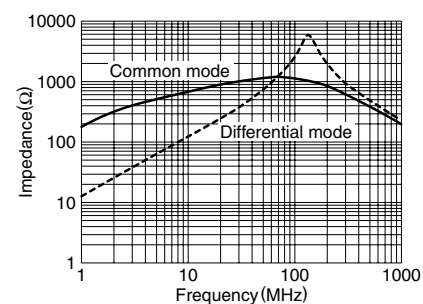
ACM9070-701-2PL



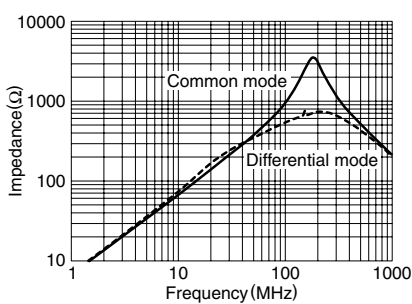
ACM1211-701-2PL



ACM1211-102-2PL



ACM1513-551-2PL



MEASURING CIRCUITS

