

EMC Components

ACM Series

Common Mode Choke Coils for DC Power Line SMD

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)

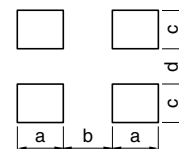
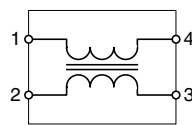
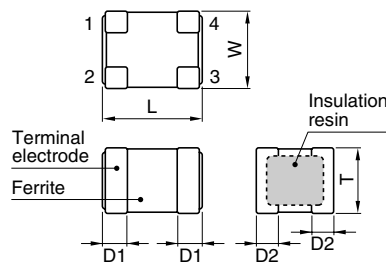
- (1) Series
(2) Dimensions L×W
7060: 7.0×6.0mm
(3) Impedance[at 100MHz]
701: 700Ω
(4) Number of lines
2PL: 2-line
(5) Packaging style
T: ø180mm reel taping
TL: ø330mm reel taping
(6) TDK internal code

TEMPERATURE RANGES

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 | 0.65 |
| ACM4532 | 4.5±0.2 | 3.2±0.2 | 3.0 max. | 1 | 1 |

- 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.

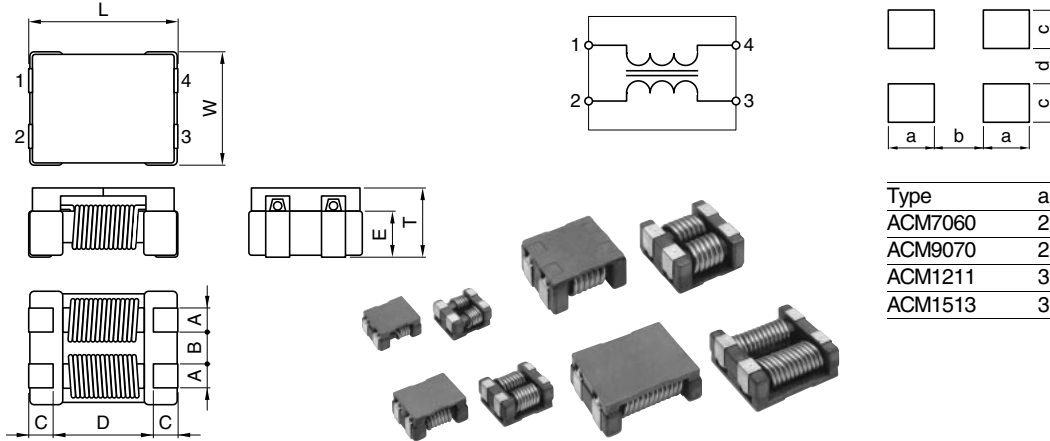
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SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN(REFLOW SOLDERING)

ACM7060, 9070, 1211, 1513 TYPES



Dimensions in mm

| Type | a | b | c | d |
|---------|-----|------|-----|-----|
| ACM7060 | 2.5 | 4.0 | 1.5 | 1.5 |
| ACM9070 | 2.5 | 6.0 | 1.5 | 2.0 |
| ACM1211 | 3.2 | 7.6 | 2.7 | 2.5 |
| ACM1513 | 3.3 | 10.4 | 2.7 | 3.8 |

Dimensions in mm

| Type | L | W | T | A | B | C | D | E | Weight(g) |
|---------|----------|----------|---------|---------|---------|---------|----------|---------|-----------|
| ACM7060 | 7.0±0.2 | 6.0±0.2 | 3.5max. | 1.5±0.2 | 1.5±0.2 | 1.5±0.2 | 4.0typ. | 2.2±0.2 | 0.35 |
| ACM9070 | 9.0±0.2 | 7.0±0.2 | 4.5max. | 1.5±0.2 | 2.0±0.2 | 1.5±0.2 | 6.0typ. | 2.9±0.2 | 0.82 |
| ACM1211 | 12.0±0.3 | 11.0±0.3 | 6.0max. | 2.7±0.2 | 2.5±0.2 | 2.3±0.2 | 7.4typ. | 3.8±0.2 | 2.20 |
| ACM1513 | 15.0±0.4 | 13.0±0.4 | 6.0max. | 2.7±0.2 | 3.8±0.2 | 2.3±0.2 | 10.4typ. | 3.8±0.2 | 3.15 |

ELECTRICAL CHARACTERISTICS

| Part No. | Impedance (Ω)[at 100MHz] | | DC resistance (mΩ)max. | Rated current Idc(A)max. | Insulation resistance (MΩ)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 | 50 |
| ACM7060-701-2PL | 500 | 700 | 15 | 4 | 10 | 50 |
| ACM9070-701-2PL | 500 | 700 | 10 | 5 | 10 | 50 |
| ACM1211-701-2PL | 500 | 700 | 6 | 8 | 10 | 50 |
| ACM1211-102-2PL | 750 | 1000 | 14 | 6 | 10 | 50 |
| ACM1513-551-2PL | 450 | 550 | 4 | 10 | 10 | 50 |

PACKAGING STYLE AND QUANTITIES

| Packaging style | Type | Quantity | |
|-----------------|---------|----------|------------------|
| Taping | ACM3225 | ø180mm | 1000 pieces/reel |
| | | ø330mm | 5000 pieces/reel |
| | ACM4532 | ø180mm | 500 pieces/reel |
| | | ø330mm | 2000 pieces/reel |
| | ACM7060 | ø330mm | 1500 pieces/reel |
| | ACM9070 | ø330mm | 800 pieces/reel |
| | ACM1211 | ø330mm | 500 pieces/reel |
| | ACM1513 | ø330mm | 500 pieces/reel |

EMC Components

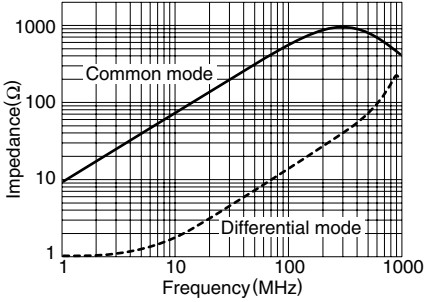
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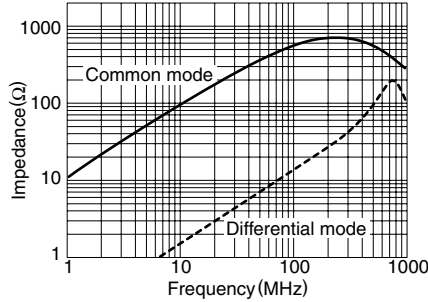
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

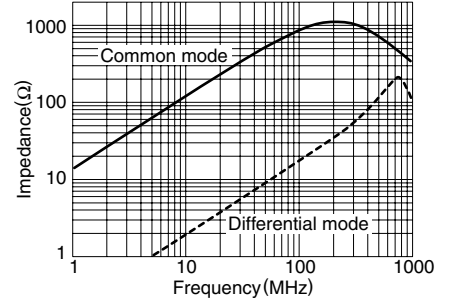
ACM3225-601-2P



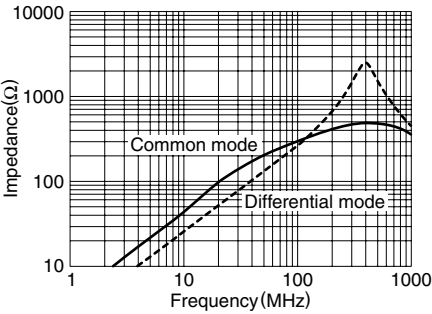
ACM4532-601-2P



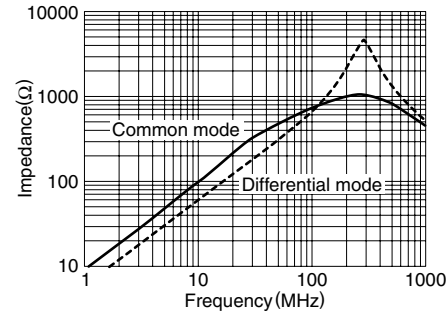
ACM4532-801-2P



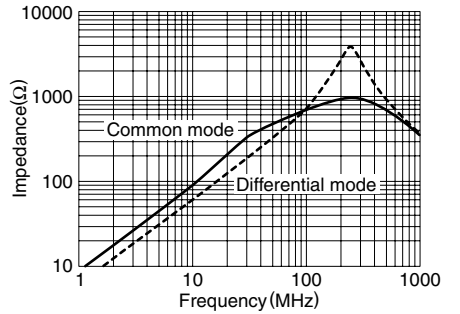
ACM7060-301-2PL



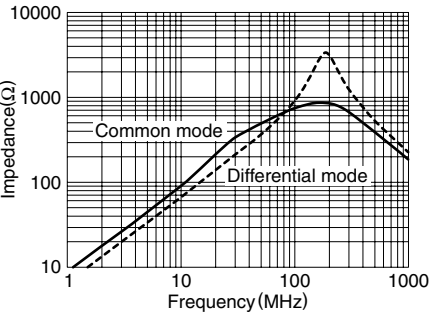
ACM7060-701-2PL



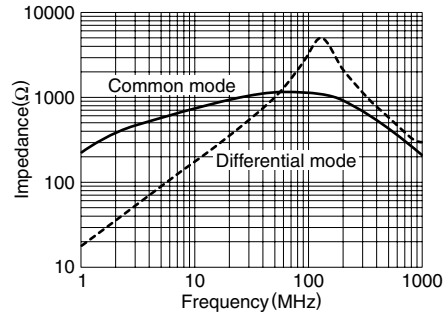
ACM9070-701-2PL



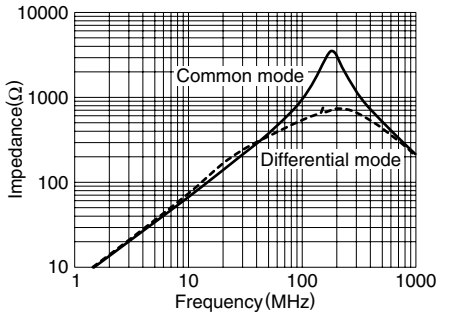
ACM1211-701-2PL



ACM1211-102-2PL



ACM1513-551-2PL



MEASURING CIRCUITS

