

Common mode filters

Automotive signal line (for infotainment)

ACM series



AEC-Q200

ACM2012 type



FEATURES

- Highly reliable with a temperature range of -40 to $+105^{\circ}\text{C}$.
- Impedance variation: Extensive lineup are available for compatibility with various usages
- Common mode EMI measure: Possible to suppress waveform common mode EMI without straining the waveform.
- Operating temperature range: -40 to $+105^{\circ}\text{C}$
- Compliant with AEC-Q200

APPLICATION

- Radiated noise suppression for car multimedia interfaces (MOST, USB2.0, IDB-1394, etc.).
- Application guides: [Car Infotainment](#)

PART NUMBER CONSTRUCTION

| | | | | | | | | |
|-------------|--------------------------------|---|-------------------------------------|---|-----------------|---|-----------------|---------------|
| ACM | 2012 | - | 900 | - | 2P | - | T | 001 |
| Series name | L x W dimensions 2.0x1.2 mm | | Impedance (Ω) at 100MHz | | Number of lines | | Packaging style | Internal code |

CHARACTERISTICS SPECIFICATION TABLE

| Common mode impedance | | DC resistance | Rated current | Rated voltage | Part No. |
|-------------------------------|------------------|------------------------------|---------------|---------------|-------------------------------------|
| [100MHz]* (Ω)min. | (Ω)typ. | [1 line] (Ω)max. | (mA)max. | (V)max. | |
| 65 | 90 | 0.19 | 400 | 50 | ACM2012-900-2P-T001 |
| 90 | 120 | 0.22 | 370 | 50 | ACM2012-121-2P-T001 |
| 150 | 200 | 0.25 | 350 | 50 | ACM2012-201-2P-T001 |
| 270 | 360 | 0.50 | 220 | 50 | ACM2012-361-2P-T001 |
| 510 | 680 | 1.3 | 200 | 50 | ACM2012-681-2P-T001 |
| 750 | 1000 | 1.5 | 190 | 50 | ACM2012-102-2P-T001 |
| 1500 | 2200 | 2.5 | 150 | 50 | ACM2012-222-2P-T001 |

* Operating temperature range: -40 to $+105^{\circ}\text{C}$

Measurement equipment

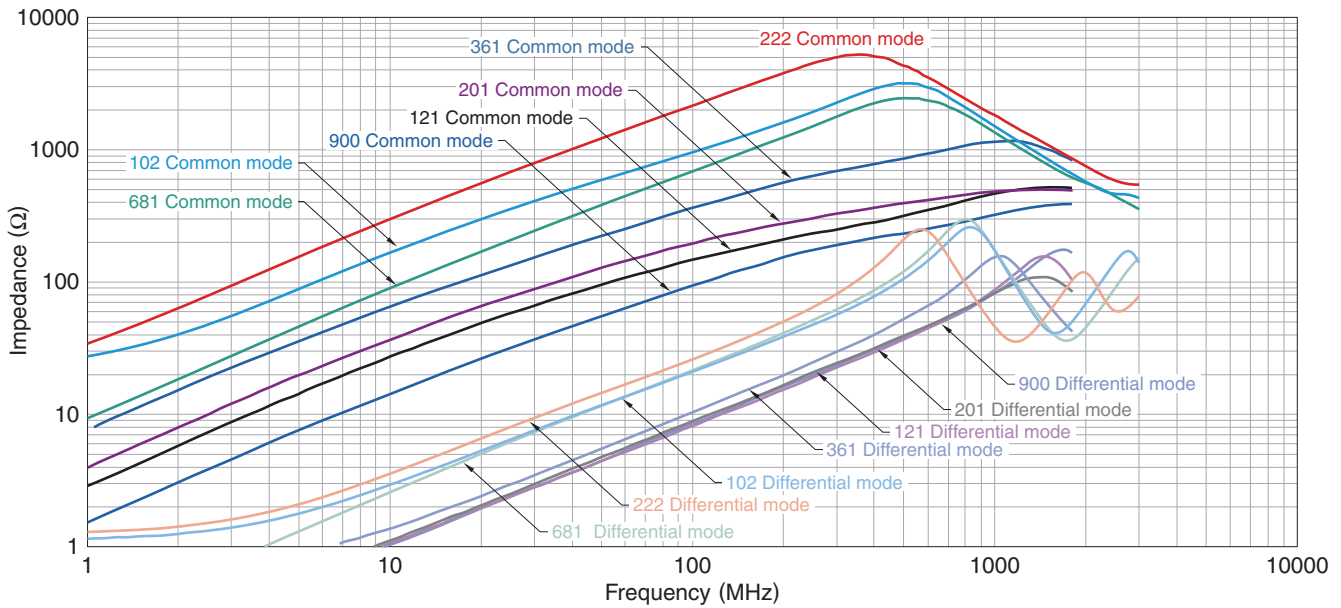
| Measurement item | Product No. | Manufacturer |
|-----------------------|-------------|-----------------------|
| Common mode impedance | 4991A | Keysight Technologies |
| DC resistance | 4338A | Keysight Technologies |
| Insulation resistance | 4339A | Keysight Technologies |

* Equivalent measurement equipment may be used.



ACM2012 type

■ IMPEDANCE VS. FREQUENCY CHARACTERISTICS



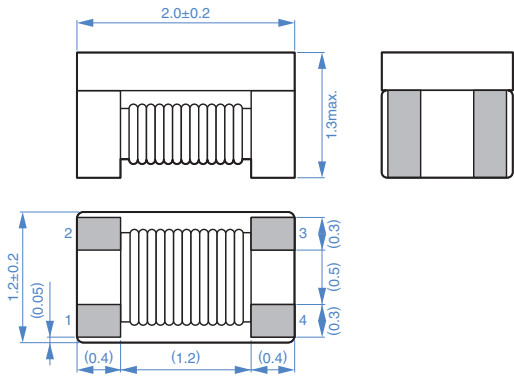
Measurement equipment

| Product No. | Manufacturer |
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| 4991A | Keysight Technologies |

* Equivalent measurement equipment may be used.

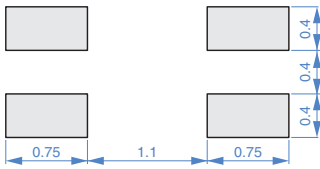
ACM2012 type

SHAPE & DIMENSIONS



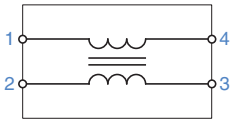
Dimensions in mm

RECOMMENDED LAND PATTERN



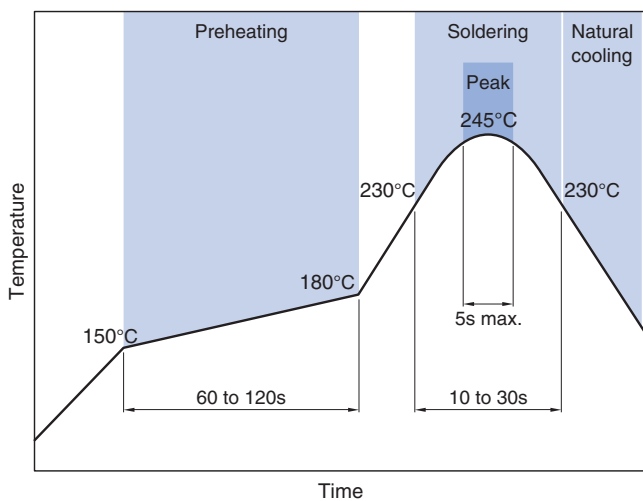
Dimensions in mm

CIRCUIT DIAGRAM



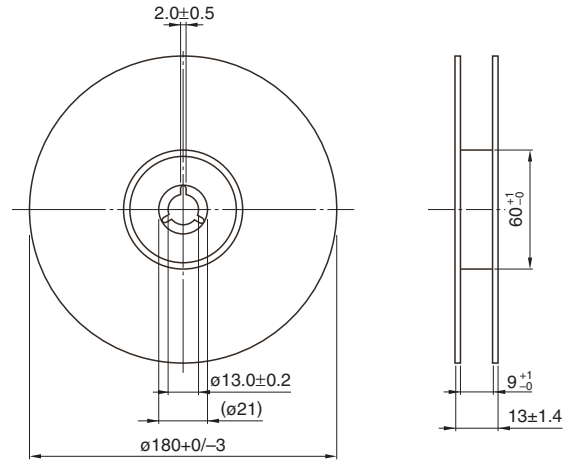
• No polarity

RECOMMENDED REFLOW PROFILE



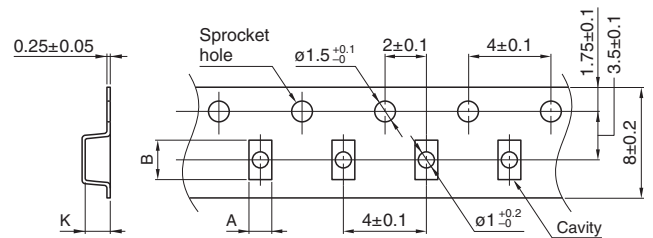
PACKAGING STYLE

REEL DIMENSIONS



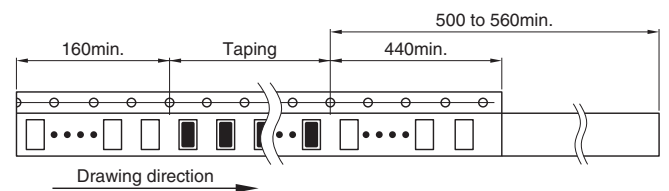
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

| Type | A | B | K |
|---------|-------|--------|-------|
| ACM2012 | (1.4) | (2.25) | (1.4) |



Dimensions in mm

PACKAGE QUANTITY

| | |
|------------------|----------------|
| Package quantity | 2,000 pcs/reel |
|------------------|----------------|

TEMPERATURE RANGE, INDIVIDUAL WEIGHT

| Operating temperature range | Storage temperature range* | Individual weight |
|-----------------------------|----------------------------|-------------------|
| -40 to +105 °C | -40 to +105 °C | 10 mg |

* The storage temperature range is for after the assembly.