Common mode filters/Chokes
For power line
ACP series

RoHS REACH Halogen Free Lead Free

ACP3225 type

Product Portal Search Simulation Model Tech Library Application Guides

FEATURES

- Chip type common mode filter for DC power supply lines.
- Can reduce power consumption and improve EMC suppression because of low direct current resistance and excellent common mode impedance.
- Compatible with high-density portable devices, which are always being made smaller and lighter, because the height has been reduced.
- Operating temperature range: –40 to +85°C

APPLICATION

- Power line noise countermeasure for various electronic equipment.
- Noise countermeasure for AC adapter lines and battery lines for note PCs, portable game machines, and mobile phones.

PART NUMBER CONSTRUCTION

ACP	3225	-	102	-	2P	-	T	000
Series name	L×W×H dimensions 3.2×2.5×1.9 mm		Impedance (Ω) at 100MHz		Number of lines		Packaging style	Internal code

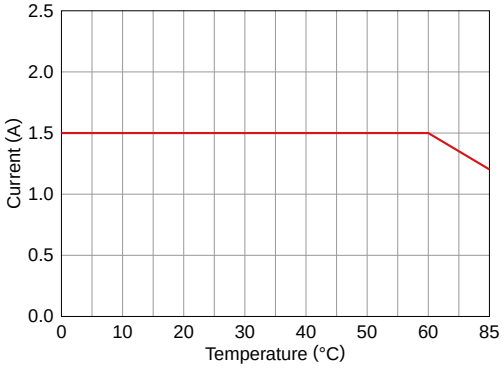
CHARACTERISTICS SPECIFICATION TABLE

Common mode impedance [at 100MHz] (Ω)	Tolerance	DC resistance (mΩ)typ	(mΩ)max.	Rated current * (A)max.	Rated voltage (V)max.	Insulation resistance (MΩ)min.	Part No.
1000	±25%	50	100	1.5	60	10	ACP3225-102-2P-T000
500	±25%	40	100	2	60	10	ACP3225-501-2P-T000

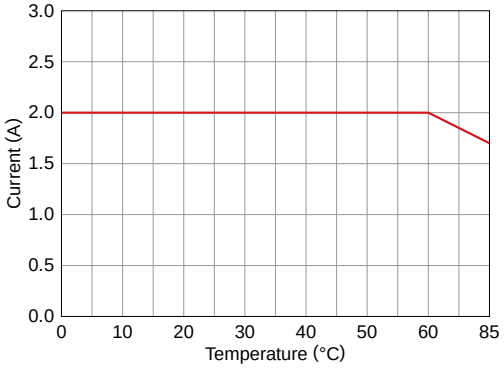
* Temperature derating was considered for the rated current.

TEMPERATURE CHARACTERISTICS (DERATING)

ACP3225-102-2P



ACP3225-501-2P



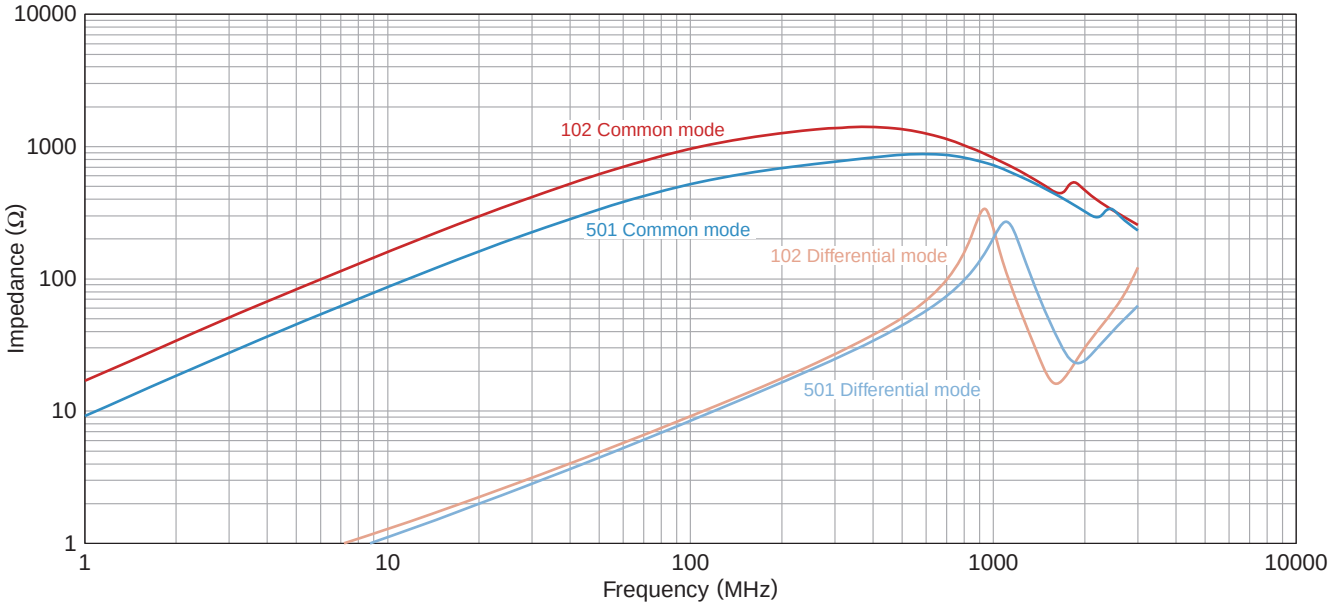
Measurement equipment

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.

ACP3225 type

IMPEDANCE VS. FREQUENCY CHARACTERISTICS



Measurement equipment

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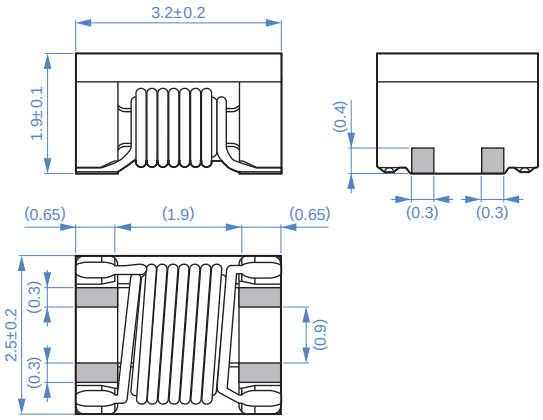
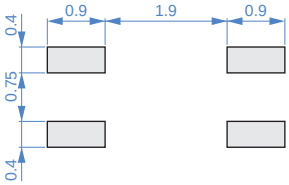
SHAPE & DIMENSIONS



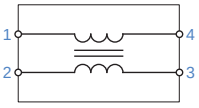
Dimensions in mm

RECOMMENDED LAND PATTERN



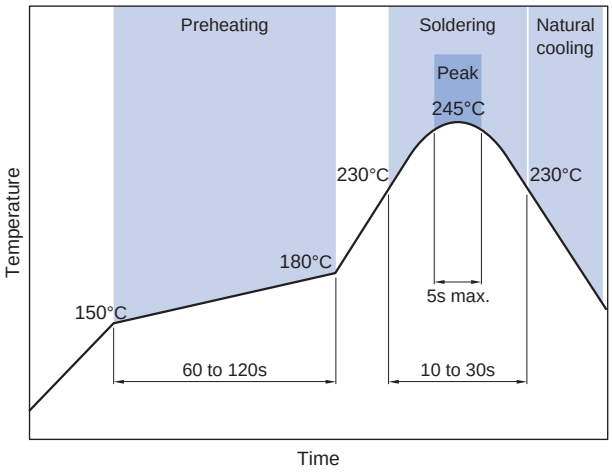
Dimensions in mm

CIRCUIT DIAGRAM



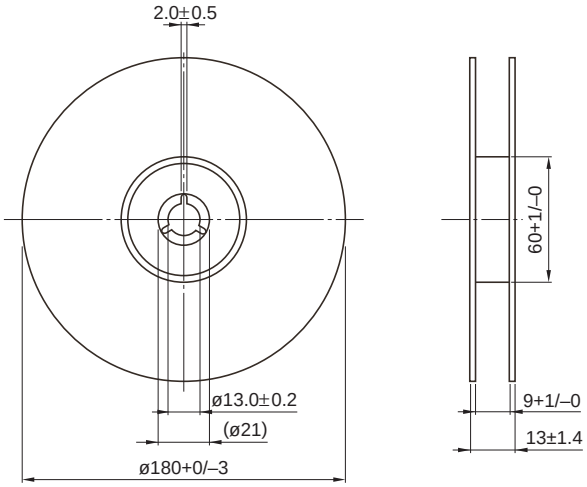
• No polarity

RECOMMENDED REFLOW PROFILE



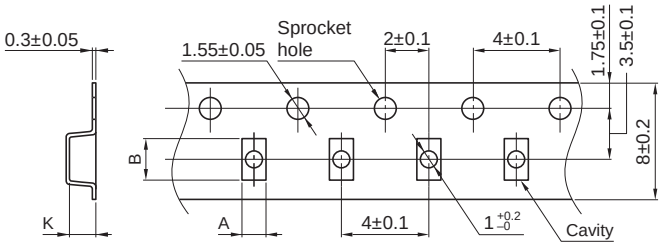
PACKAGING STYLE

REEL DIMENSIONS



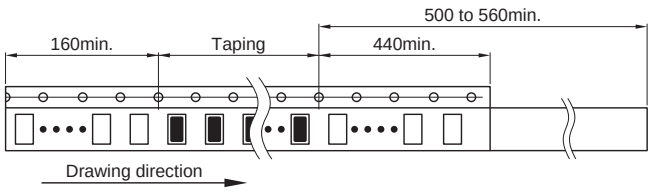
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

Type	A	B	K
ACP3225	(2.9)	(3.6)	(2.35)



Dimensions in mm

PACKAGE QUANTITY

Package quantity	1000 pcs/reel

TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating temperature range *	Storage temperature range **	Individual weight
–40 to +85 °C	–40 to +85 °C	60 mg

* For actual use, use within the temperature derating range shown in page 1/4 of this catalog.
**The storage temperature range is for after the assembly.

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products

REMINDERS

- The storage period is within 6 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH or less).
  If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.
  If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Carefully lay out the coil for the circuit board design of the non-magnetic shield type.
  A malfunction may occur due to magnetic interference.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
  The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
  If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

(1) Aerospace/aviation equipment
(2) Transportation equipment (cars, electric trains, ships, etc.)
(3) Medical equipment
(4) Power-generation control equipment
(5) Atomic energy-related equipment
(6) Seabed equipment
(7) Transportation control equipment
(8) Public information-processing equipment
(9) Military equipment
(10) Electric heating apparatus, burning equipment
(11) Disaster prevention/crime prevention equipment
(12) Safety equipment
(13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.