

# Multilayer Ferrite Chip Bead (High Current)

ACML-0402HC



RoHS/RoHS II Compliant



1.00 x 0.50 x 0.50mm

## FEATURES:

- Multilayer monolithic structure yields high reliability
- Unique terminal electrode design ensures high rated current
- High impedance over a wide frequency range

## APPLICATIONS:

- Noise suppression for computers and peripheral devices, DVD cameras, LCD TVs, communication equipments, OA equipments, etc.
- Reduces noise in ultra high speed circuits as well

## STANDARD SPECIFICATIONS:

**Operating Temperature:** -55°C ~ +125°C

**Storage Temperature:** -55°C to +125°C

| Part Number<br>ACML-0402HC-<br>Impedance Code | Impedance         | Frequency | DC<br>resistance | Rated<br>Current |
|-----------------------------------------------|-------------------|-----------|------------------|------------------|
| Units                                         | $\Omega \pm 25\%$ | MHz       | $\Omega \max$    | mA max           |
| Symbol                                        | Z                 | F         | R <sub>DC</sub>  | I <sub>R</sub>   |
| ACML-0402HC-100                               | 10                | 100       | 0.045            | 2000             |
| ACML-0402HC-300                               | 30                | 100       | 0.035            | 2200             |
| ACML-0402HC-330                               | 33                | 100       | 0.035            | 2200             |
| ACML-0402HC-600                               | 60                | 100       | 0.075            | 1500             |
| ACML-0402HC-800                               | 80                | 100       | 0.070            | 1500             |
| ACML-0402HC-121                               | 120               | 100       | 0.090            | 1300             |
| ACML-0402HC-221                               | 220               | 100       | 0.160            | 900              |
| ACML-0402HC-301                               | 300               | 100       | 0.200            | 600              |
| ACML-0402HC-471                               | 470               | 100       | 0.300            | 500              |
| ACML-0402HC-601                               | 600               | 100       | 0.340            | 500              |

## Test Conditions and Equipments

**I<sub>R</sub>:** Rated current applied when the chip surface temperature rise just 40°C against chip surface temperature.

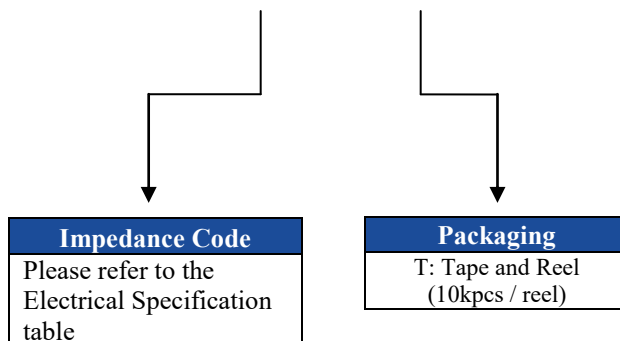
**Electric power supplier, Electric current meter, Thermometer.**

**Z:** Impedance Analyzer HP4291 or equivalent, 50mV.

**DCR:** LCR Meter HP4263A or equivalent

## OPTIONS AND PART IDENTIFICATION:

ACML-0402HC-  -



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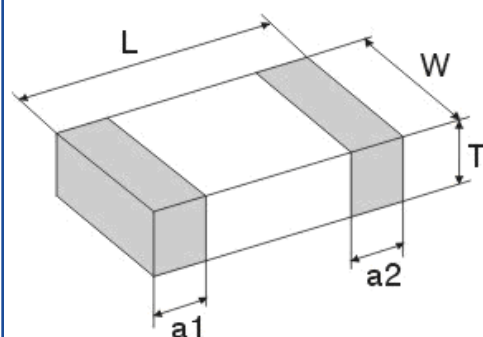


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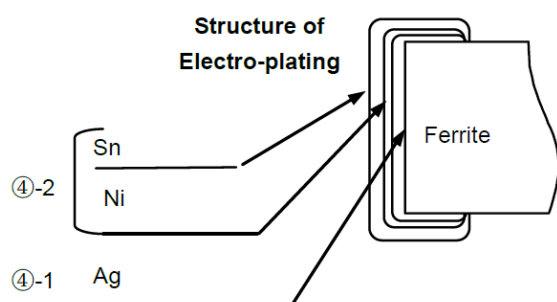
1.00 x 0.50 x 0.50mm

## OUTLINE DIMENSIONS:



| L         | W         | T         | a1, a2    |
|-----------|-----------|-----------|-----------|
| 1.00±0.15 | 0.50±0.15 | 0.50±0.15 | 0.25±0.10 |

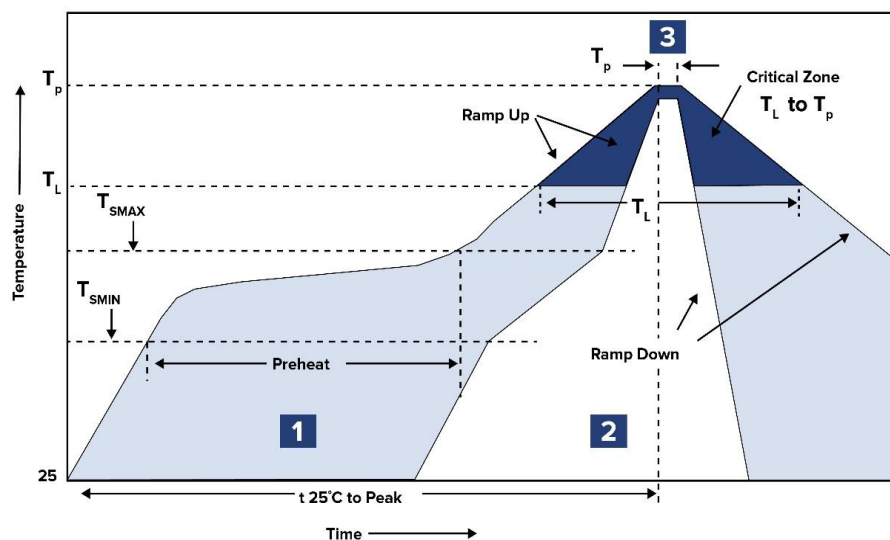
## Materials



|   | Part Name          | Material |
|---|--------------------|----------|
| 1 | Base Material      | Ferrite  |
| 2 | Internal Conductor | Ag       |
| 3 | Terminal Electrode | Ag       |
| 4 | Terminal Electrode | Ni-Sn    |

Dimension: mm

## REFLOW PROFILE



| Zone | Description | Temperature                               | Times         |
|------|-------------|-------------------------------------------|---------------|
| 1    | Preheat     | $T_{SMIN} \sim T_{SMAX}$<br>150°C ~ 200°C | 60 ~ 120 sec. |
| 2    | Reflow      | $T_L$<br>217°C                            | 60 ~ 90 sec.  |
| 3    | Peak heat   | $T_P$<br>260°C                            | 10 sec. Max   |

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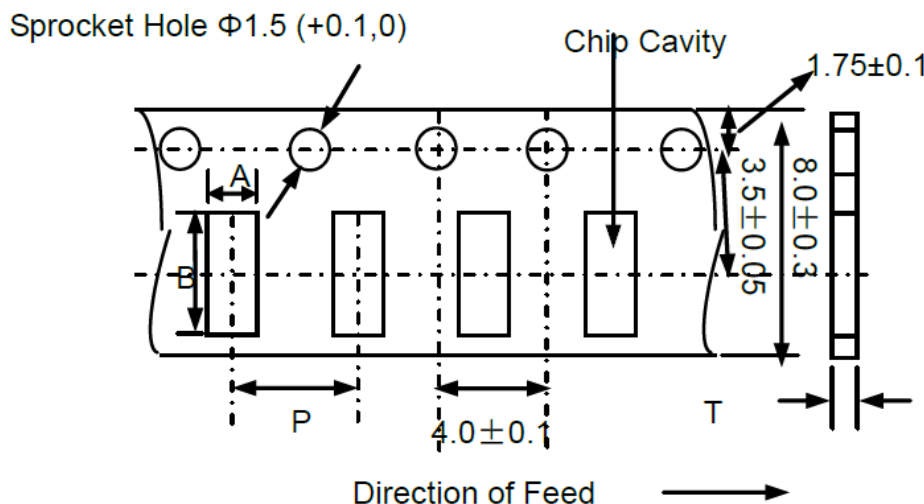
RoHS/RoHS II Compliant



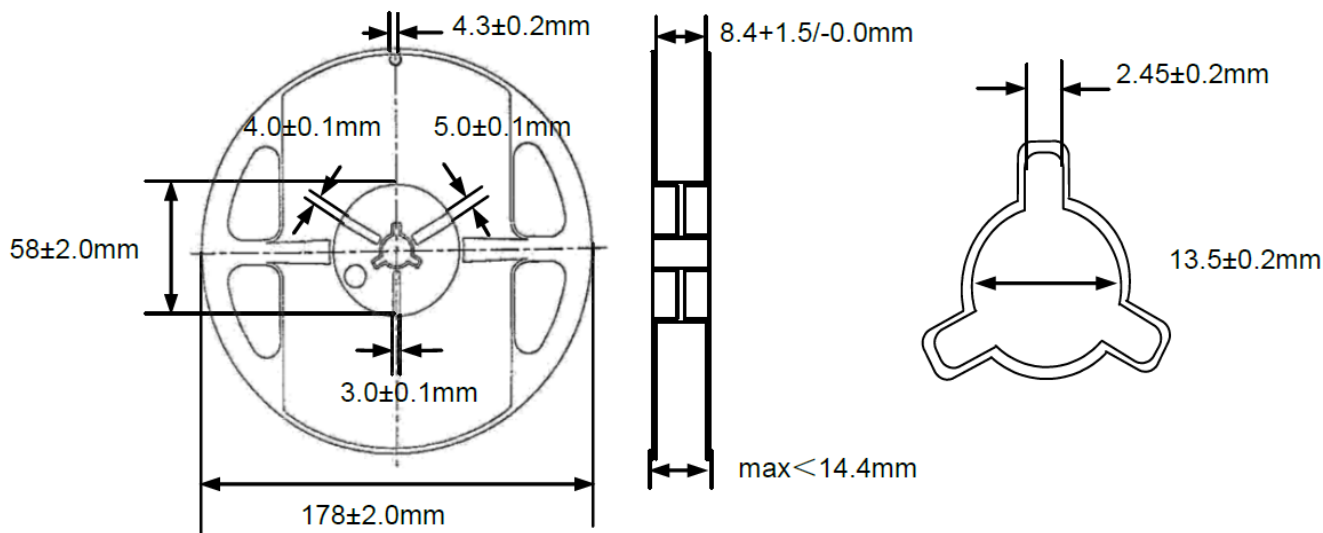
1.00 x 0.50 x 0.50mm

## TAPE & REEL:

T= tape and reel (10,000 pcs/reel)



| Reel Dimensions |                |                |       |
|-----------------|----------------|----------------|-------|
| A               | B              | P              | T max |
| $0.65 \pm 0.1$  | $1.15 \pm 0.1$ | $2.0 \pm 0.05$ | 0.8   |



Dimension: mm

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