

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 ACML-0402HC- Impedance Code | Impedance | Frequency | DC resistance | Rated Current |
|---|-------------------|-----------|------------------|------------------|
| Units | $\Omega \pm 25\%$ | MHz | Ω max | mA max |
| Symbol | Z | F | R _{DC} | I _R |
| 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

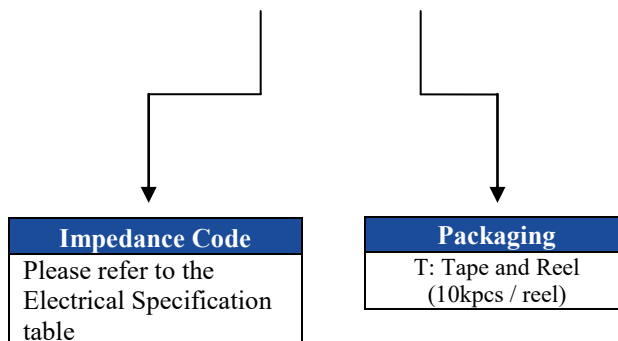
I_R: Rated current applied when the chip surface temperature rise just 40°C against chip surface temperature.
Electric power supplier, Electric current meter, Thermometer.

Z: Impedance Analyzer HP4291 or equivalent, 50mV.

DCR: LCR Meter HP4263A or equivalent

OPTIONS AND PART IDENTIFICATION:

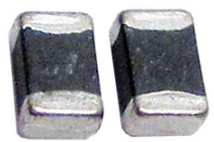
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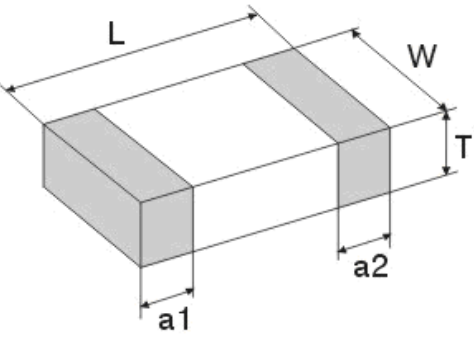
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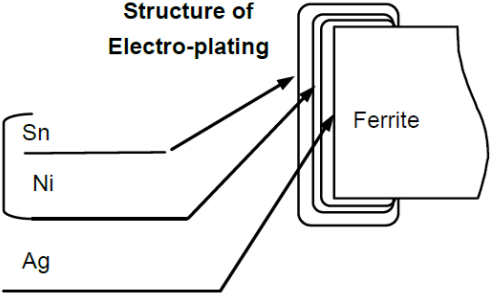
OUTLINE DIMENSIONS:



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

Materials

Structure of Electro-plating

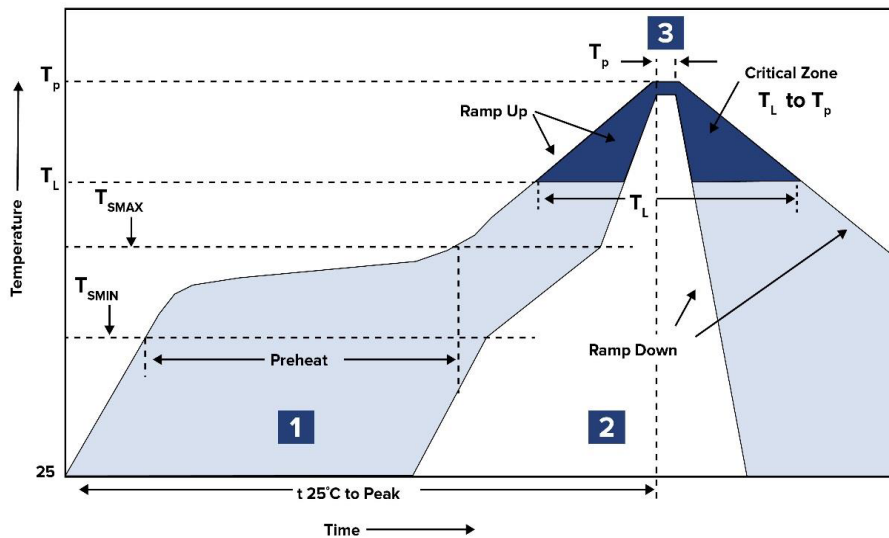


| | Part Name | Material |
|---|--------------------|----------|
| 1 | Base Material | Ferrite |
| 2 | Internal Conductor | Ag |
| 3 | Terminal Electrode | Ag |
| 4 | Terminal Electrode | Ni-Sn |

④-2 Sn
Ni
④-1 Ag

Dimension: mm

REFLOW PROFILE



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

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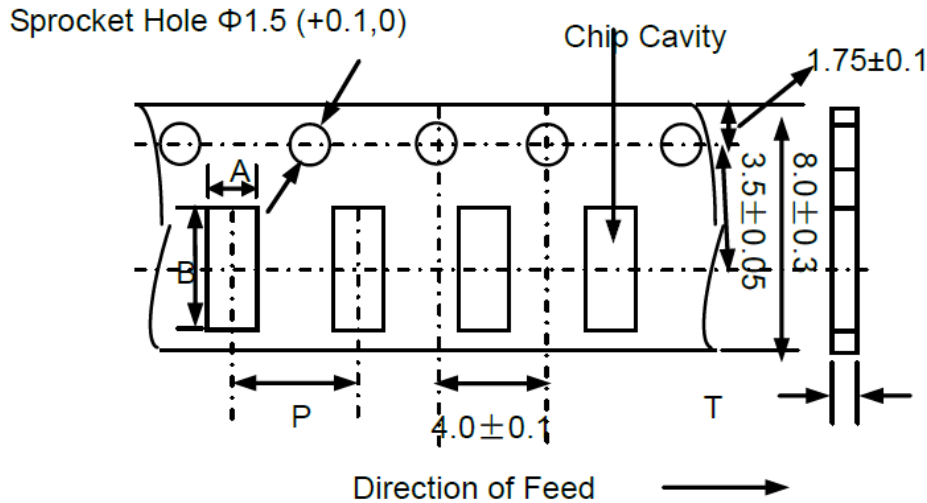
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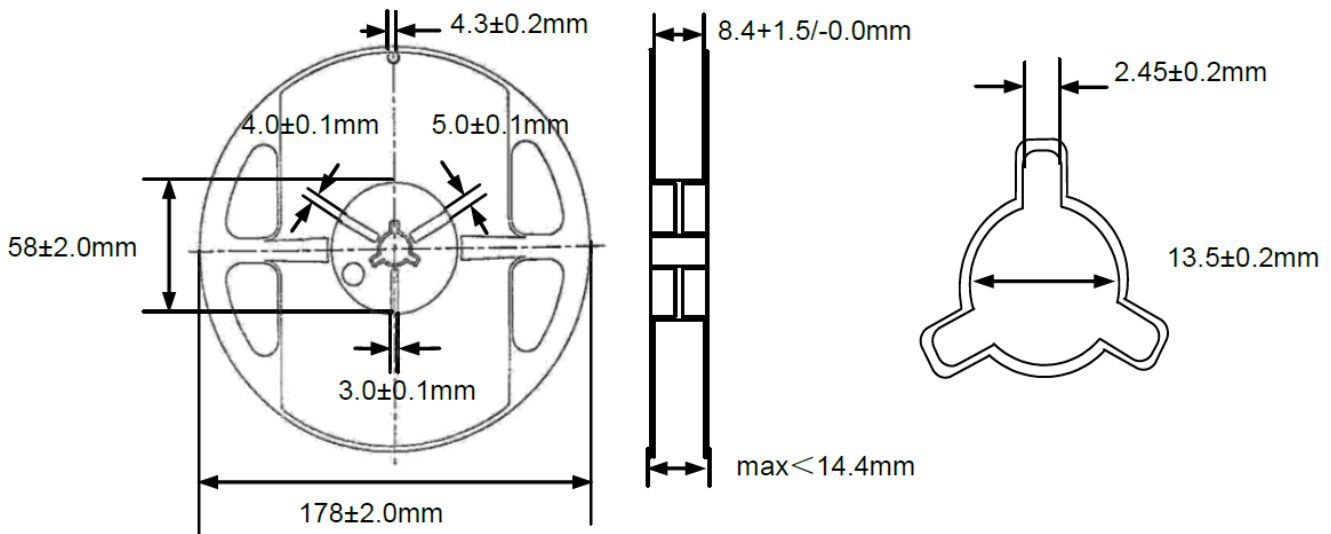
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TAPE & REEL:

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



| Reel Dimensions | | | |
|-----------------|----------------|----------------|-------|
| A | B | P | T max |
| 0.65 ± 0.1 | 1.15 ± 0.1 | 2.0 ± 0.05 | 0.8 |



Dimension: mm

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