

# Multilayer Ferrite Chip Bead (High Current)



1.00 x 0.50 x 0.50mm

ACML-0402HC



RoHS/RoHS II Compliant

## 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	$\Omega$ max	mA max
Symbol	Z	F	R <sub>DC</sub>	I <sub>R</sub>
ACML-0402HC-050	5	100	0.05	2000
ACML-0402HC-110	11	100	0.05	2000
ACML-0402HC-310	31	100	0.06	1500
ACML-0402HC-600	60	100	0.08	1500
ACML-0402HC-700	70	100	0.10	1300
ACML-0402HC-121	120	100	0.10	1200
ACML-0402HC-221	220	100	0.25	1000
ACML-0402HC-301	300	100	0.30	1000

## 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-  -

**Impedance Code**  
Please refer to the  
Electrical Specification  
table

**Packaging**  
T: Tape and Reel  
(10kpcs / reel)

# Multilayer Ferrite Chip Bead (High Current)



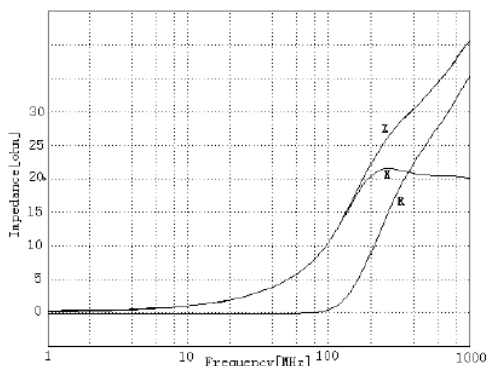
1.00 x 0.50 x 0.50mm

ACML-0402HC

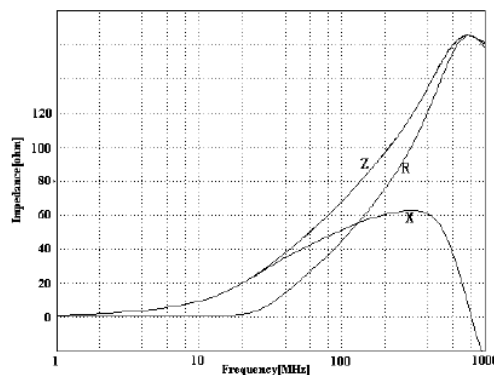
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## FREQUENCY RESPONSE

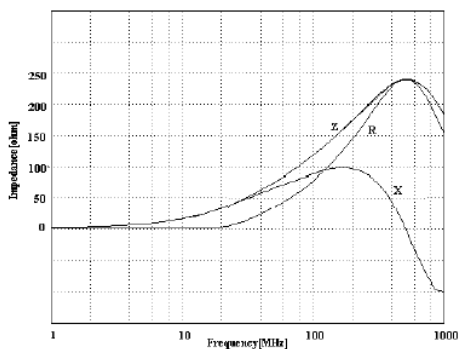
ACML-0402HC-110



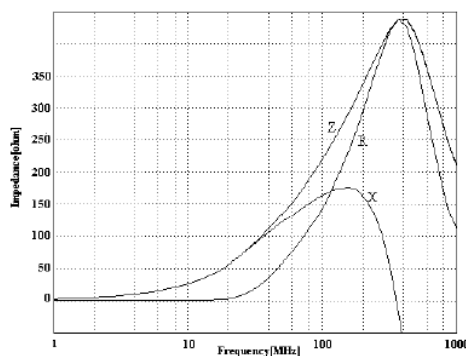
ACML-0402HC-600



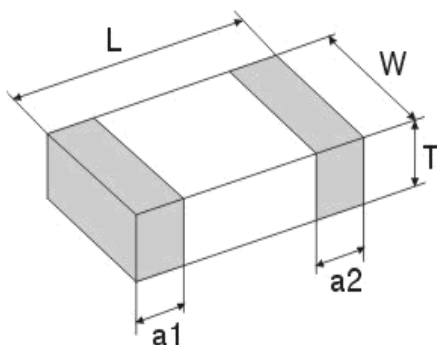
ACML-0402HC-121



ACML-0402HC-301

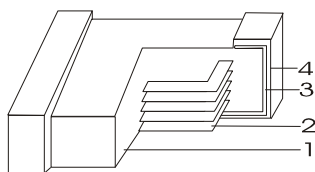


## OUTLINE DIMENSIONS:



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

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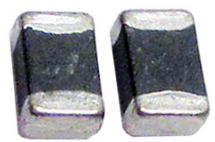
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ACML-0402HC

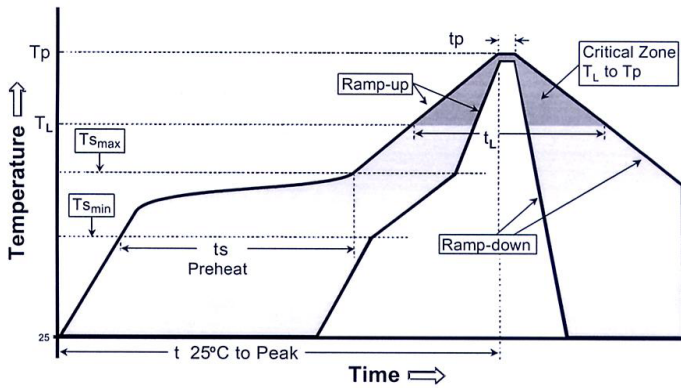


RoHS/RoHS II Compliant



1.00 x 0.50 x 0.50mm

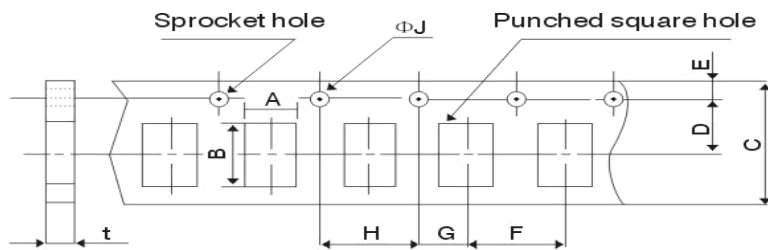
## REFLOW PROFILE



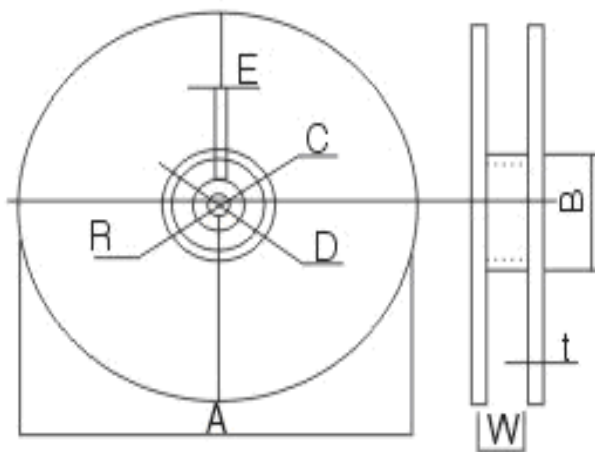
Profile Feature	Lead-Free Assembly
Time maintained above: - Temperature ( $T_L$ ) - Time ( $t_L$ )	217 °C 60-150 seconds
Peak/Classification Temperature ( $T_p$ ) Peak/Classification Time ( $T_p$ )	260 °C 3-4 seconds
Time within 5 °C of actual Peak Temperature ( $t_p$ )	20-40 seconds
Ramp-Down Rate	6°C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

## TAPE & REEL:

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



T	0.5±0.15
A	0.65±0.15
B	1.15±0.15
C	8.0±0.3
D	3.5±0.05
E	1.75±0.1
F	2.0±0.05
G	2.0±0.05
H	4.0±0.1
$\phi J$	1.5+0.1/-0
t(max)	0.8±0.05



A	178±2
B	60±2
C	13.0±0.5
D	21.0±0.8
E	2.0±0.5
W	10.0±1.15
t	1.2±0.2
R	1.0±0.25

Dimension: mm

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