

# MULTILAYER FERRITE CHIP BEAD

ACML-0402



**RoHS**  
Compliant



1.00 x 0.50 x 0.50mm

## FEATURES:

- Magnetic shielded structure designed to minimize crosstalk
- Multilayer monolithic structure yields high reliability
- Substantial EMI suppression from dozens of MHz to hundreds of MHz
- Wide range of impedance values available

## APPLICATIONS:

- Noise suppression in digital equipment such as computer and its peripheral devices, DVD player, digital camera, TV and communication equipments.

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	ACML-0402
Operating temperature:	-55°C to + 125°C
Storage temperature:	-10°C to + 40°C

Part Number ACML-0402- 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-0402-050	5	100	0.05	500
ACML-0402-070	7	100	0.05	500
ACML-0402-110	11	100	0.05	500
ACML-0402-190	19	100	0.10	300
ACML-0402-310	31	100	0.20	300
ACML-0402-600	60	100	0.30	200
ACML-0402-800	80	100	0.35	200
ACML-0402-121	120	100	0.40	150
ACML-0402-181	180	100	0.50	150
ACML-0402-221	220	100	0.45	150
ACML-0402-241	240	100	0.60	125
ACML-0402-301	300	100	0.65	100
ACML-0402-471	470	100	0.80	100
ACML-0402-501	500	100	0.80	100
ACML-0402-601	600	100	1.00	100
ACML-0402-102	1000	100	1.30	100
ACML-0402-152	1500	100	1.60	100

### Test Conditions and Equipments

**I<sub>R</sub>**: Rated current applied when the chip surface temperature rise 20°C. 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-0402 -  -

**Inductance Code**  
Please refer to the P/N table

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

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**ABRACON**  
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## FREQUENCY RESPONSE



## 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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## REFLOW PROFILE:



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

## TAPE & REEL: Tape and reel 10,000pcs/reel



A	0.65±0.15
B	1.3±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
ΦJ	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

Dimensions: mm

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