

# MULTILAYER FERRITE CHIP BEAD

ACML-0603



RoHS/RoHS II Compliant



1.00 x 0.80 x 0.80mm

## 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-0603
Operating temperature:	-55°C to + 125°C
Storage temperature:	-55°C to + 125°C

Part Number ACML-0603- 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-0603-060	6	100	0.05	1000
ACML-0603-110	11	100	0.05	1000
ACML-0603-190	19	100	0.05	1000
ACML-0603-220	22	100	0.20	800
ACML-0603-310	31	100	0.05	500
ACML-0603-500	50	100	0.08	500
ACML-0603-600	60	100	0.30	600
ACML-0603-800	80	100	0.16	200
ACML-0603-101	100	100	0.20	200
ACML-0603-121	120	100	0.40	600
ACML-0603-181	180	100	0.30	200
ACML-0603-221	220	100	0.45	500
ACML-0603-301	300	100	0.35	200
ACML-0603-331	330	100	0.50	500
ACML-0603-471	470	100	0.55	400
ACML-0603-501	500	100	0.45	200
ACML-0603-601	600	100	0.45	200
ACML-0603-102	1000	100	0.80	200
ACML-0603-152	1500	100	0.80	200
ACML-0603-202	2000	100	1.00	200

## Test Conditions and Equipments

**I<sub>R</sub>:** Rated current applied when the chip surface temperature rise just 20°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



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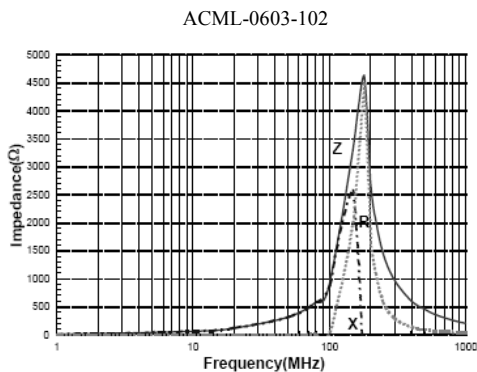
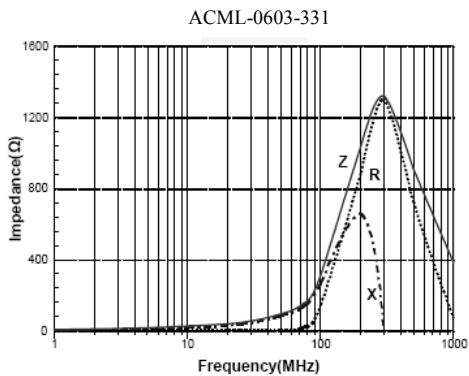


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## FREQUENCY CHARACTERISTICS



ABRACON IS  
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## PART NUMBER IDENTIFICATION

ACML-0603-  -

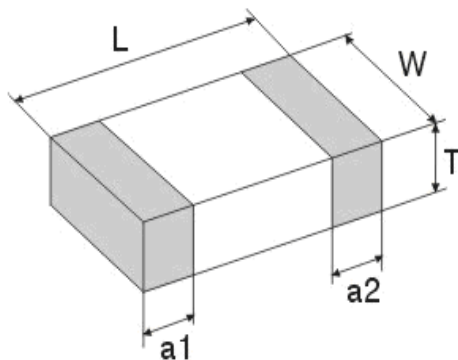
### Impedance Code

Please refer to the Electrical Specification table

### Packaging

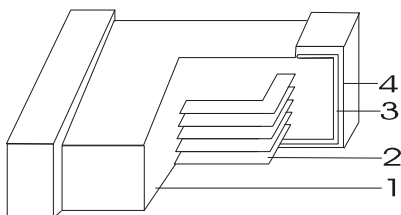
T: Tape and Reel  
(4kpcs / reel)

## OUTLINE DIMENSION:



L	W	T	a1, a2
1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20

## 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
Average Ramp-Up Rate ( $T_{Smax}$ to $T_p$ )	3°C/second max.
Preheat - Temperature Min ( $T_{Smin}$ ) - Temperature Max ( $T_{Smax}$ ) - Time ( $t_{Smin}$ to $t_{Smax}$ )	150 °C 200 °C 60-180 seconds
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:

### Packing

T= tape and reel (4,000 pcs/reel)



A	1.05±0.15
B	1.9±0.15
C	8.0±0.3
D	3.5±0.05
E	1.75±0.1
F	4.0±0.1
G	2.0±0.05
H	4.0±0.1
$\Phi J$	1.5+0.1/-0
t(max)	1.0±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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