SMD Multilayer Chip Inductor for Choke



1.60 x 0.8 x 0.8mm

ASMCI-0603

RoHS Compliant

FEATURES:

- Monolithic structure designed for high reliability
- Excellent solderability and heat resistance
- Magnetic shield designed to eliminate cross coupling
- High DC current and low DCR

APPLICATIONS:

Choke circuits in DC power line for PC, mobile phones, digital cameras, camcorder, and music players.

ELECTRICAL SPECIFICATIONS:

Operating Temperature: -40˚C to +85˚C

Storage Temperature: -10˚C to +40˚C, 70% RH max

Part Number ASMCI-0603- Inductance Code	Inductance	Tolerance	DCR	SRF Min.	Max. Rated Current
Units	µH	%	Ω ± 30%	MHz	mA
Symbol	L	M=±20%, N=±30%	DCR	SRF	Ir
ASMCI-0603-R10	0.1	M, N	0.14	240	700
ASMCI-0603-R22	0.22	M, N	0.27	150	550
ASMCI-0603-R47	0.47	M, N	0.42	105	400
ASMCI-0603-1R0	1.0	M, N	0.20	75	190
ASMCI-0603-2R2	2.2	M, N	0.40	50	140
ASMCI-0603-4R7	4.7	M, N	0.60	35	100
ASMCI-0603-100	10	M, N	0.90	20	50

Test Conditions

a. Ambient Temperature: 20± 15°C
b. Relative Humidity: 65%±20%
c. Air Pressure: 86KPa to 106KPa

Inductance (L): High Accuracy RF Impedance/Material Analyzer-HP4291B+HP16192A or Equivalent, 1MHz, -20dBm or 50mV.
Direct Current Resistance (DCR): High Accuracy Milliohmeter-HP4338B or Equivalent
Self-Resonant Frequency (SRF): High Accuracy RF Impedance/Material Analyzer HP4291B+HP16192A or Equivalent, -20dBm or 50mV.
Rated current (Ir): HP6632B system DC power supply, HP4291B+HP16192A+HP16200A or equivalent.

Definition of Rated Current (Ir): Ir is the value of DC current as inductance L (µH) decreased just 50% against initial value.

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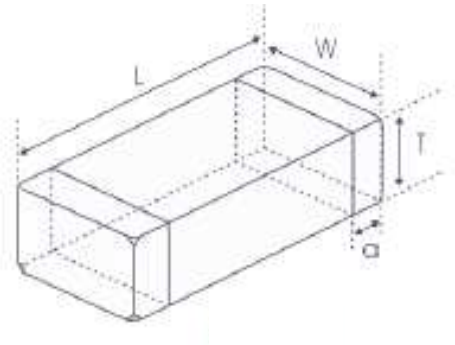
RoHS Compliant

PART IDENTIFICATIONS:

ASMCI-0603 - [ ] [ ] - [ ]

Inductance Code	Tolerance	Packaging
Please refer to the table above	M: ±20% N: ±30%	T: Tape and Reel (4kpcs / reel)

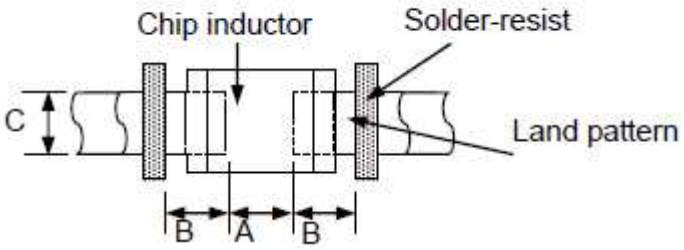
OUTLINE DRAWING:



L	W	T	a
1.60±0.15 [0.063±0.006]	0.8±0.15 [0.031±0.006]	0.8±0.15 [0.031±0.006]	0.3±0.2 [0.012±0.008]

Dimension: mm [inch]

Recommended Land Pattern

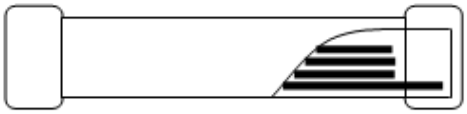


A	B	C
0.60~0.80	0.60~0.80	0.60~0.80

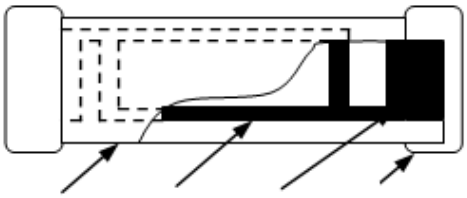
Dimension: mm

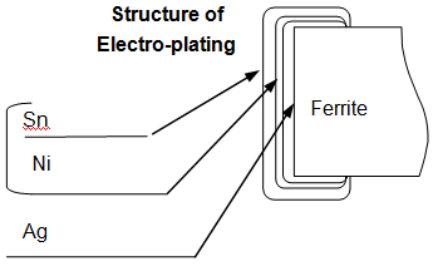
MATERIALS:

Side View



Top View





	Part Name	Material
1	Base Material	Ferrite
2	Internal Conductor	Ag
3	Pull out Electrode	Ag
4	Terminal Electrode	Ag (Inner layer) Ni-Sn (Outer layer)

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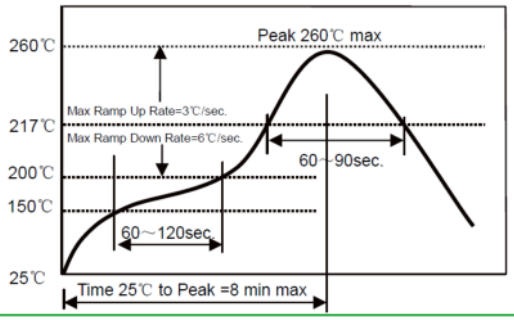
ASMCI-0603



1.60 x 0.8 x 0.8mm

Pb RoHS Compliant

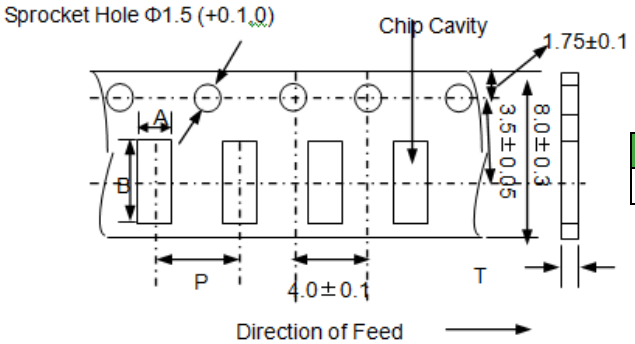
REFLOW PROFILE:



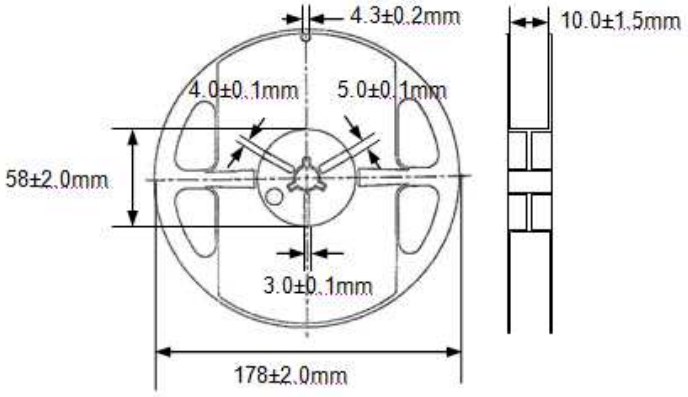
Δ Preheat condition: 150 ~200˚C /60~120sec.
Δ Allowed time above 217˚C: 60~90sec.
Δ Max temp: 260˚C
Δ Max time at max temp: 10sec.
Δ Solder paste: Sn/3.0Ag/0.5Cu
Δ Allowed Reflow time: 2x max

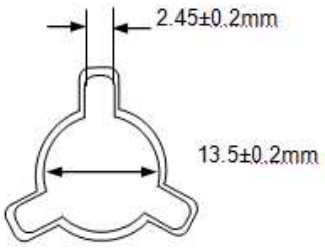
TAPE & REEL:

Packing
T: 4,000pcs / reel



A	B	P	T(max)
1.0±0.2	1.8±0.2	4.0±0.1	1.1





Dimension: mm

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