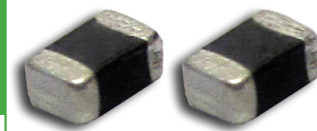


MULTILAYER FERRITE CHIP INDUCTOR

AIML-0603HC

RoHS/RoHS II Compliant



1.6 x 0.8 x 0.8mm

FEATURES:

- Monolithic structure for higher reliability, compact size, & lightweight
- Magnetically shielded design to eliminate cross coupling
- Excellent solderability and heat resistance for reflow soldering
- Perfect shape for PCB mounting with no polarity

APPLICATIONS:

- DC/DC converter circuit for Front End Module such as Skyworks Solution
- Portable AV equipments such as Digital Camera, Camcorder remote Control.

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N:	AIML-0603HC-xxx
Operating temperature:	-55°C to + 125°C
Storage temperature:	-55°C to + 125°C

Part No.	L(μ H)	Tolerance	Test Freq.	SRF(MHz)	DCR(Ω)	Isat(mA)	Irms(mA)
		(%)	(MHz)	(min)	$\pm 30\%$	(max)	(max)
AIML-0603HC-3R3M	3.3	M	1	70	0.40	80	600
AIML-0603HC-4R7M	4.7	M	1	50	0.50	60	500

Test Conditions and equipments

L, Q: HP4291 Impedance Analyzer

DCR: HP4263A LCR meter

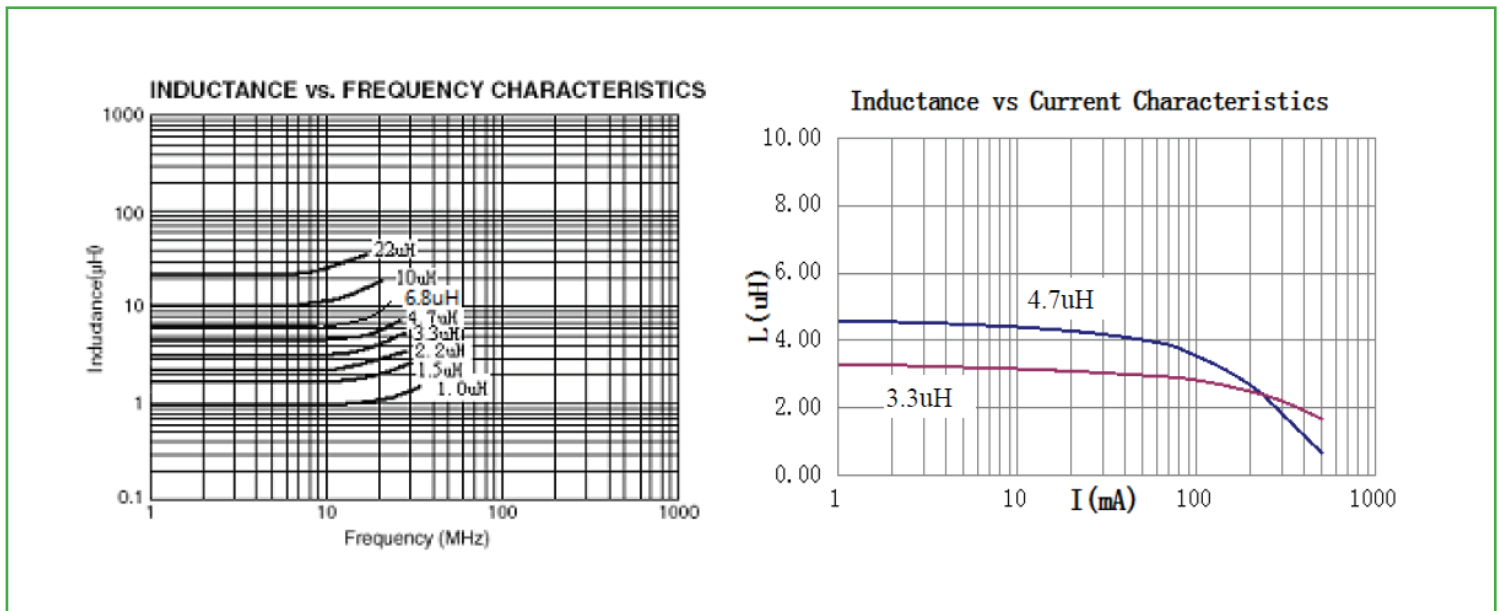
SRF: HP4291 Impedance analyzer

Irms: HP4291 Impedance Analyzer, DC power HP6632 and Adapter HP16200.

Current when temperature of the product reaches +40°C.

Isat: HP4291 Impedance Analyzer, DC power HP6632 and Adapter HP16200. $\Delta L/L$ (initial) $\geq -30\%$

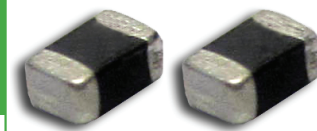
ELECTRICAL CHARACTERISTICS CURVES



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1.6 x 0.8 x 0.8mm

OPTIONS AND PART IDENTIFICATION:

AIML-0603HC--

Inductance Code

Please refer to the table above

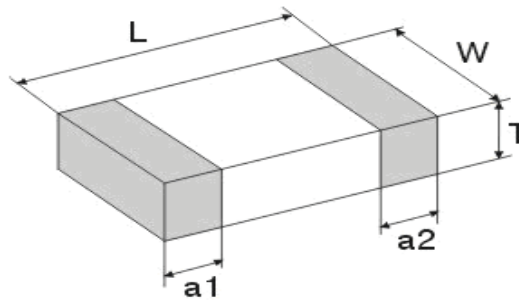
Tolerance

M: $\pm 20\%$

Packaging

T: Tape and Reel
(4kpcs / reel)

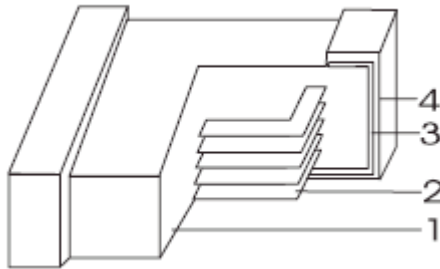
OUTLINE DRAWING:



Dimension: mm

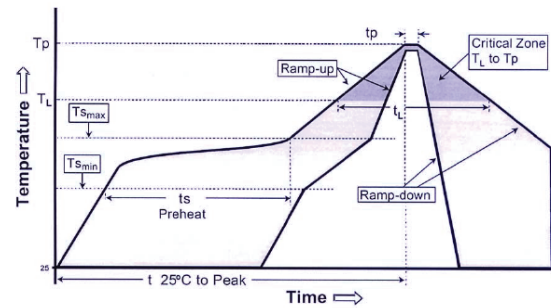
L	W	T	a1,a2
1.60 \pm 0.15	0.80 \pm 0.15	0.80 \pm 0.15	0.30 \pm 0.20

MATERIAL:



Part Name	Material
1 Base Material	Ferrite (Ni-Cu-Zn series)
2 Internal Conductor	Ag
3 Terminal Electrode	Ag
4 Terminal Electrode	Ni-Sn

REFLOW PROFILE:

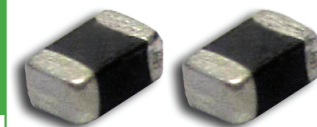


Profile Feature	Lead-Free Assembly
Average Ramp-Up Rate (T _{max} to T _p)	3°C /second max.
Preheat - Temperature Min (T _{min}) - Temperature Max (T _{max}) - Time (t _{min} to t _{max}) min to t _{max}	150 °C 200 °C 60-180 seconds
Time maintained above: - Temperature (T _L) - Time (t _L)	217 °C 60-150 seconds
Peak/Classification Temperature (T _p) Peak/Classification Time (T _p)	260 °C 3-4 seconds
Time within 5 °C of actual Peak Temperature (tp)	20-40 seconds
Ramp-Down Rate	6°C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

MULTILAYER FERRITE CHIP INDUCTOR

AIML-0603HC

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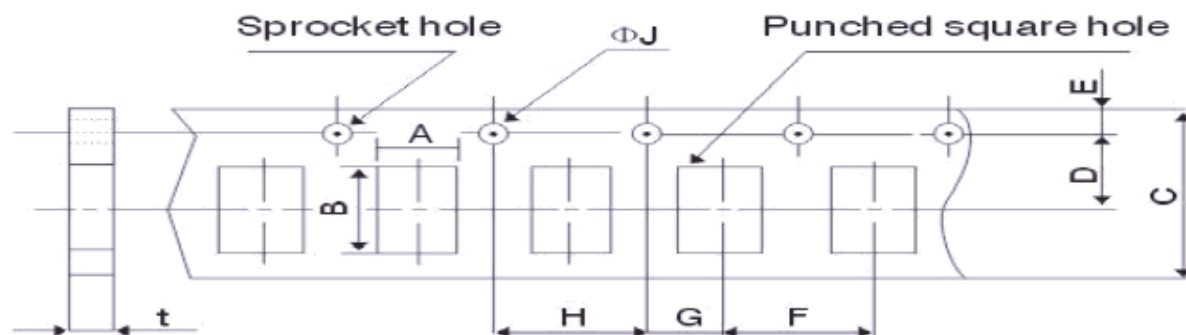


1.6 x 0.8 x 0.8mm

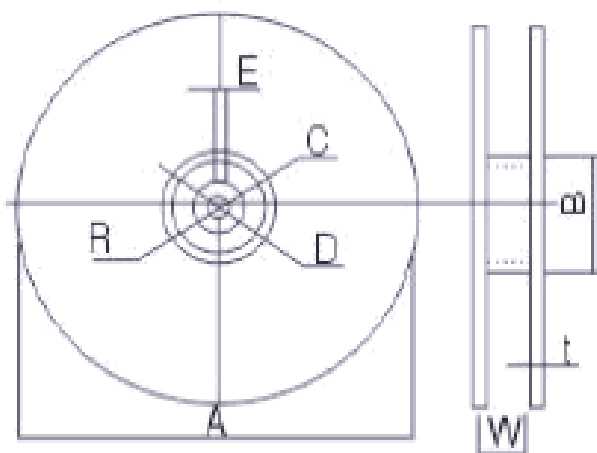
TAPE & REEL:

Packing

T: 4,000pcs / reel



A	B	C	D	E	F	G	H	ΦJ	t(max)
1.05±0.15	1.9±0.15	8.0±0.3	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	1.5+0.1/-0	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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ABRACON IS
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Revised: 01.10.14

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