

Multilayer Ferrite Chip Inductor (High Current)



2.00 x 1.25 x 0.85mm
2.00 x 1.25 x 1.15mm

AIML-0805HC



RoHS/RoHS II compliant

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-0805HC
Operating temperature:	-55°C to + 125°C
Storage temperature:	-55°C to + 125°C

Part No. AIML-0805HC- Inductance Code	L(μH)	Tolerance	Test Freq.	SRF(MHz)	DCR(Ω)	Isat(mA)	Irms(mA)
		(%)	(MHz)	(min)	±30%	(max)	(max)
AIML-0805HC-1R0	1.0	M	1.0	75	0.15	400	1400
AIML-0805HC-1R5	1.5	M	1.0	60	0.16	180	1300
AIML-0805HC-2R2	2.2	M	1.0	50	0.20	150	1200
AIML-0805HC-4R7	4.7	M	1.0	35	0.25	100	1000
AIML-0805HC-100	10.0	M	1.0	24	0.32	60	500

Test Conditions and equipments

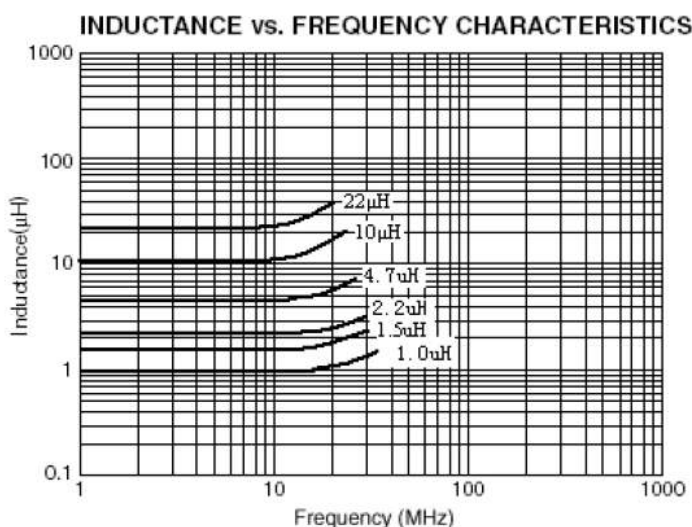
L: HP4291 Impedance Analyzer, 50mV

DCR: HP4263A LCR meter

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

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

ELECTRICAL CHARACTERISTICS CURVE



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PART NUMBER IDENTIFICATION

AIML-0805HC--

Inductance Code

Please refer to the table above

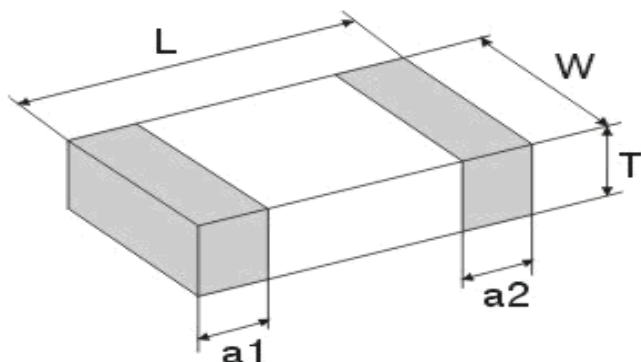
Tolerance

M: ±20%

Packaging

T: Tape and Reel
(3kpcs / reel)

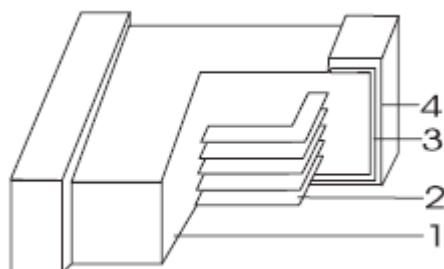
OUTLINE DIMENSION



L	W	T	a1,a2
2.00±0.20	1.25±0.20	0.85±0.10 (for 1μH~4.7μH) 1.15±0.10 (for 10μH and 22μH)	0.50±0.30

Dimension: mm

Materials



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

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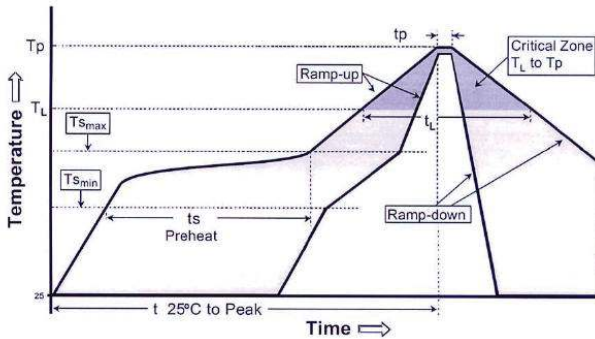


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REFLOW PROFILE

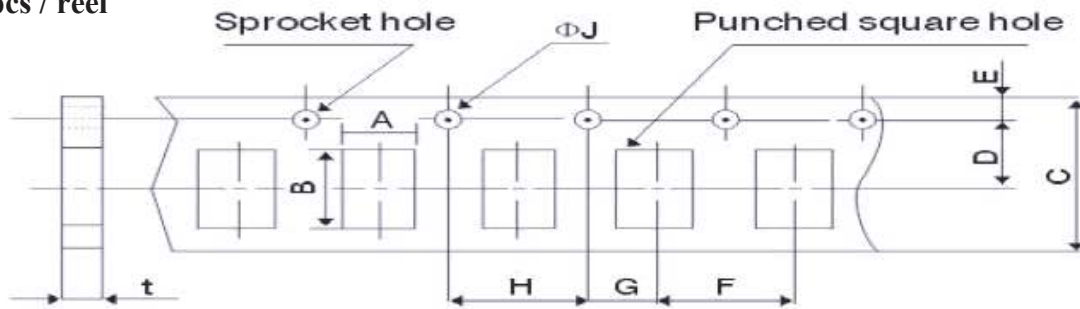


Profile Feature	Lead-Free Assembly
Average Ramp-Up Rate (T _{smax} to T _p)	3°C /second max.
Preheat - Temperature Min (T _{smin}) - Temperature Max (T _{smax}) - Time (t _{smin} to t _{smax}) min to t _{smax})	150 °C 200 °C 60-180 seconds
Time maintained above: - Temperature (T _L) - Time (t _L)	217 °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.

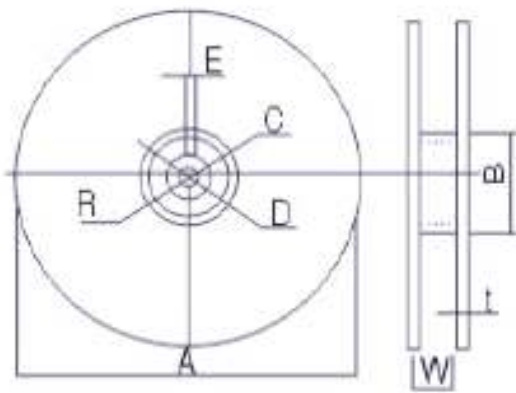
TAPE & REEL

Packing

T: 3,000pcs / reel



A	B	C	D	E	F	G	H	ΦJ	t(max)
1.5±0.15	2.5±0.2	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 (for 1µH~4.7µH) 1.1±0.05 (for 10µH and 22µH)



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

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