

Multilayer Ferrite Chip Inductor (High Current)



3.20 x 1.60 x 1.10mm

AIML-1206HC

EOL is effective immediately – Last Time Buy is NOT available after depletion of current stock.



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-1206HC
Operating temperature:	-55°C to +125°C
Storage temperature:	-55°C to +125°C

Part No. AIML-1206HC- Inductance Code	L(μH)	Tolerance	Test Freq.	SRF(MHz)	DCR(Ω)	Isat(mA)	Irms(mA)
		(%)	(MHz)	(min)	±30%	(max)	(max)
AIML-1206HC-1R0	1.0	M	1.0	90	0.10	300	1600
AIML-1206HC-1R5	1.5	M	1.0	75	0.12	280	1500
AIML-1206HC-2R2	2.2	M	1.0	58	0.15	250	1300
AIML-1206HC-3R3	3.3	M	1.0	49	0.20	200	1200
AIML-1206HC-4R7	4.7	M	1.0	41	0.32	150	980
AIML-1206HC-100	10.0	M	1.0	28	0.50	100	670

Test Conditions and equipments

L: HP4291 Impedance Analyzer, 50mV

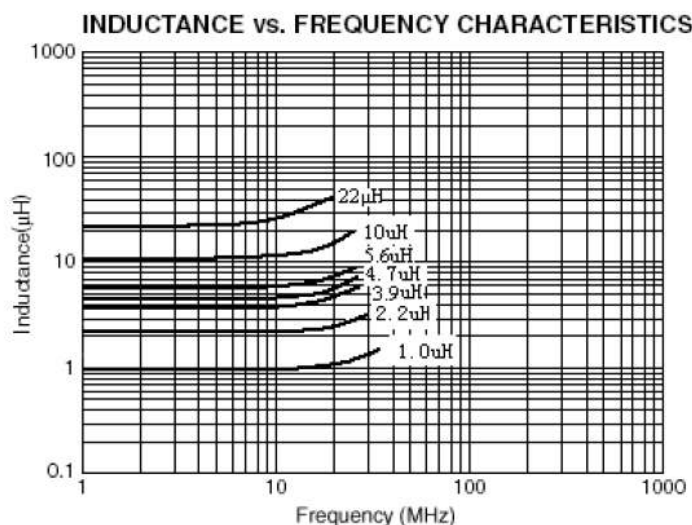
DCR: HP4263A LCR meter

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

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

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

ELECTRICAL CHARACTERISTICS CURVE



Multilayer Ferrite Chip Inductor (High Current)

AIML-1206HC



RoHS/RoHS II compliant



3.20 x 1.60 x 1.10mm

PART NUMBER IDENTIFICATION

AIML-1206HC---

Inductance Code

Please refer to the table above

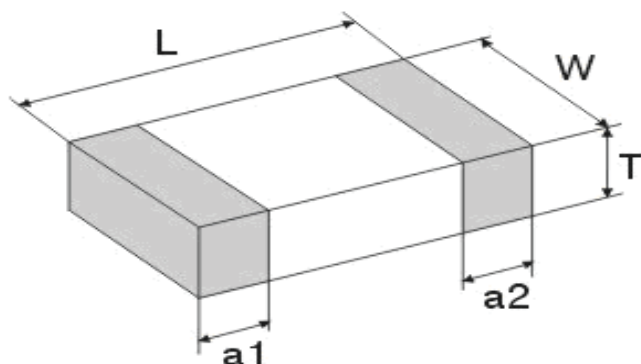
Tolerance

M: $\pm 20\%$

Packaging

T: Tape and Reel
(3kpcs / reel)

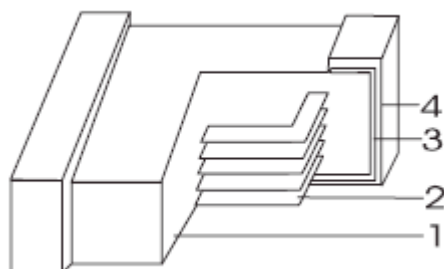
OUTLINE DIMENSION



L	W	T	a1,a2
3.20 \pm 0.20	1.60 \pm 0.20	1.10 \pm 0.30	0.50 \pm 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

Multilayer Ferrite Chip Inductor (High Current)

AIML-1206HC

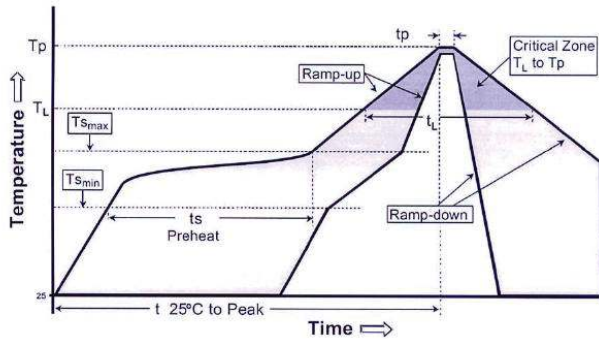


RoHS/RoHS II compliant



3.20 x 1.60 x 1.10mm

REFLOW PROFILE

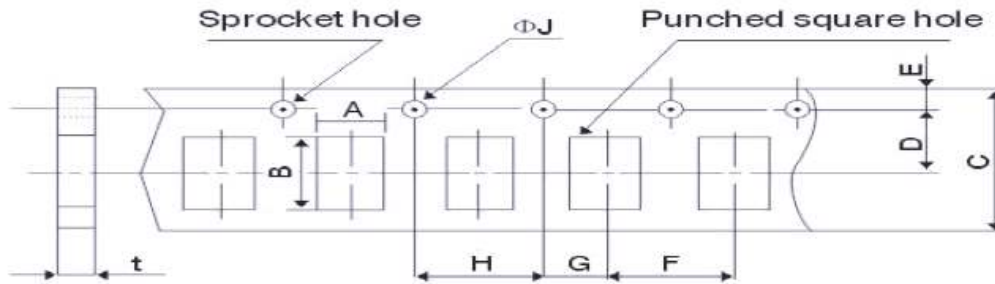


Profile Feature	Lead-Free Assembly
Average Ramp-Up Rate (T _{smax} to T _p)	3°C /second max.
Preheat <ul style="list-style-type: none"> - Temperature Min (T_{smin}) - Temperature Max (T_{smax}) - Time (t_{smin} to t_{smax}) 	150 °C 200 °C 60-180 seconds
Time maintained above: <ul style="list-style-type: none"> - 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.

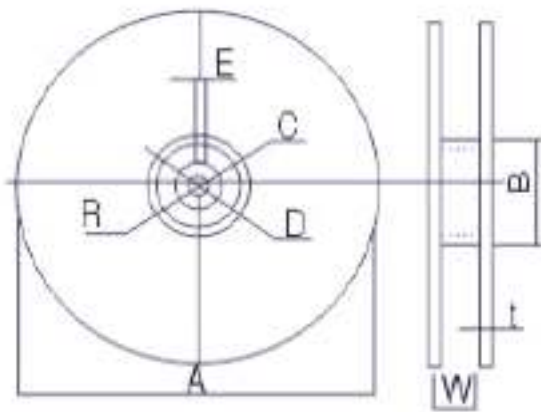
TAPE & REEL

Packing

T: 3,000pcs / reel



A	B	C	D	E	F	G	H	ΦJ	t(max)
2.0±0.2	3.6±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	2.0±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

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO 9001:2008
CERTIFIED



Visit www.abracon.com for Terms & Conditions of Sale
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Revised: 03.04.14