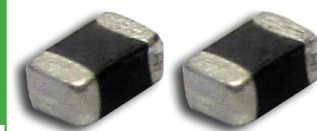


# Multilayer Ferrite Chip Inductor (High Current)



3.20 x 1.60 x 1.10mm

**AIML-1206HC**



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

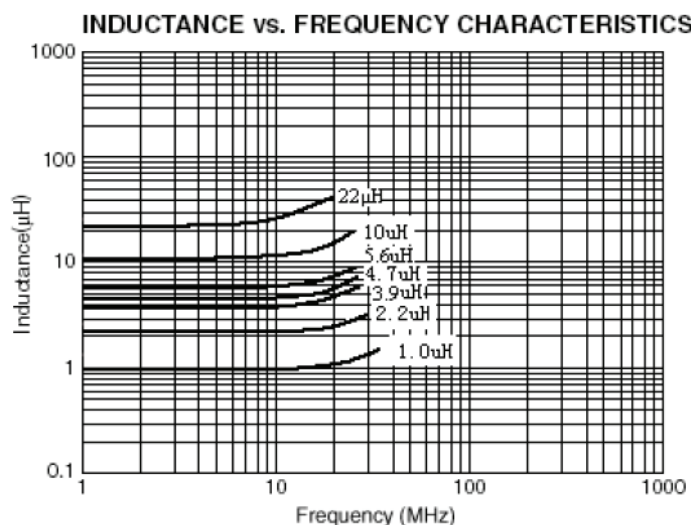
**DCR:** HP4263A LCR meter

**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

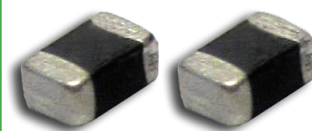


# Multilayer Ferrite Chip Inductor (High Current)

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

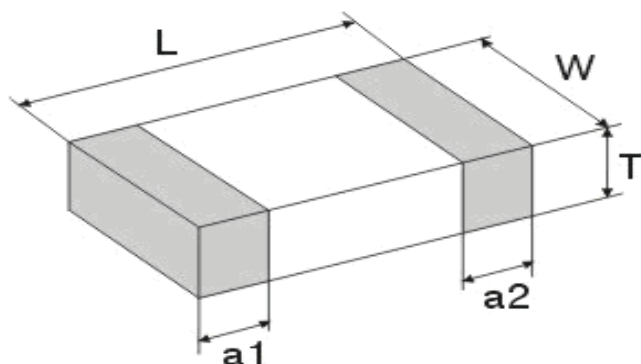
### Tolerance

M:  $\pm 20\%$

### Packaging

T: Tape and Reel  
(3kpcs / reel)

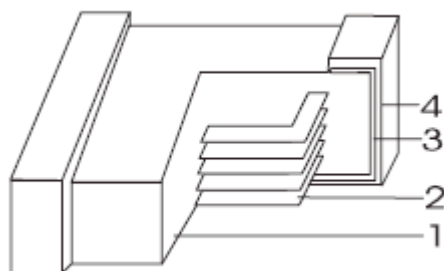
## OUTLINE DIMENSION



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



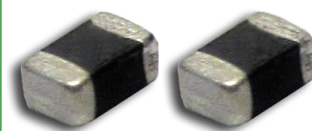
	Part Name	Material
1	Base Material	Ferrite (Ni-Cu-Zn series)
2	Internal Conductor	Ag
3	Terminal Electrode	Ag
4	Terminal Electrode	Ni-Sn

# Multilayer Ferrite Chip Inductor (High Current)

AIML-1206HC

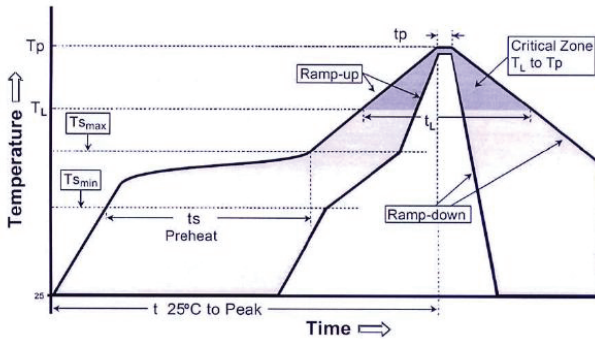


RoHS/RoHS II compliant



3.20 x 1.60 x 1.10mm

## REFLOW PROFILE

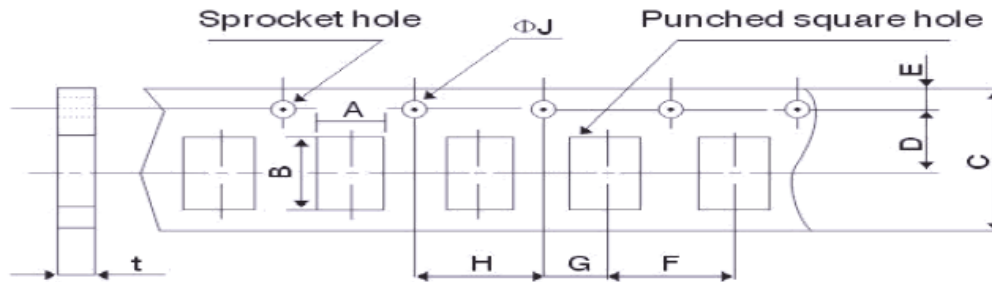


Profile Feature	Lead-Free Assembly
Average Ramp-Up Rate (T <sub>smax</sub> to T <sub>p</sub> )	3°C/second max.
Preheat <ul style="list-style-type: none"> <li>- Temperature Min (T<sub>smin</sub>)</li> <li>- Temperature Max (T<sub>smax</sub>)</li> <li>- Time (t<sub>smin</sub> to t<sub>smax</sub>) min to t<sub>smax</sub>)</li> </ul>	150 °C 200 °C 60-180 seconds
Time maintained above: <ul style="list-style-type: none"> <li>- Temperature (T<sub>L</sub>)</li> <li>- Time (t<sub>L</sub>)</li> </ul>	217 °C 60-150 seconds
Peak/Classification Temperature (T <sub>p</sub> ) Peak/Classification Time (T <sub>p</sub> )	260 °C 3-4 seconds
Time within 5 °C of actual Peak Temperature (t <sub>p</sub> )	20-40 seconds
Ramp-Down Rate	6°C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

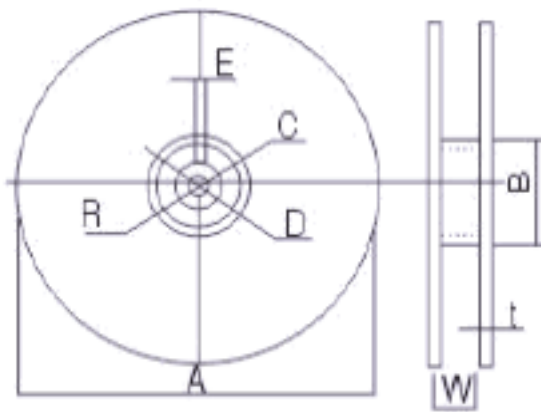
## TAPE & REEL

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

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