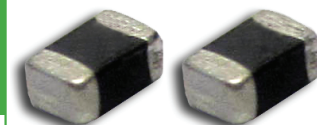


# MULTILAYER FERRITE CHIP INDUCTOR

AIML-1206



RoHS  
Compliant



3.2 x 1.6 x 1.1 mm

## 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:

- Resonance circuit, traps and filter circuits
- RF choke for cordless phones and radio equipment
- Communications, video and audio equipment, computer and remote Control.

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	AIML-1206
Operating temperature:	-55°C to + 125°C
Storage temperature:	-55°C to + 125°C

Part No. AIML-1206- Inductance Code	L(μH)	Tolerance	Q (min)	Test Freq.	SRF(MHz)	DCR(Ω)	Ir(mA)
		(%)		(MHz)	(min)	(max)	(max)
AIML-1206-R047	0.047	J, K, M	30	50	400	0.15	300
AIML-1206-R056	0.056	J, K, M	30	50	380	0.15	300
AIML-1206-R068	0.068	J, K, M	30	50	330	0.25	300
AIML-1206-R082	0.082	J, K	30	50	310	0.25	300
AIML-1206-R10	0.100	J, K	30	25	280	0.25	250
AIML-1206-R12	0.120	J, K	30	25	260	0.25	250
AIML-1206-R15	0.150	J, K	30	25	240	0.25	250
AIML-1206-R18	0.180	J, K	30	25	220	0.30	250
AIML-1206-R22	0.220	J, K	30	25	200	0.35	250
AIML-1206-R27	0.270	J, K	30	25	180	0.40	250
AIML-1206-R33	0.330	J, K	35	25	170	0.40	250
AIML-1206-R39	0.390	J, K	35	25	160	0.45	200
AIML-1206-R47	0.470	J, K	35	25	140	0.50	200
AIML-1206-R56	0.560	J, K	35	25	130	0.55	150
AIML-1206-R68	0.680	J, K	35	25	120	0.65	150
AIML-1206-R82	0.820	J, K	35	25	110	0.75	150
AIML-1206-1R0	1.0	J, K	50	10	90	0.40	100
AIML-1206-1R2	1.2	J, K	50	10	80	0.40	100
AIML-1206-1R5	1.5	J, K	50	10	70	0.45	50
AIML-1206-1R8	1.8	J, K	50	10	66	0.50	50
AIML-1206-2R2	2.2	J, K	50	10	58	0.55	50
AIML-1206-2R7	2.7	J, K	50	10	53	0.55	50
AIML-1206-3R3	3.3	J, K	50	10	49	0.60	50
AIML-1206-3R9	3.9	J, K	50	10	48	0.70	50
AIML-1206-4R7	4.7	J, K	50	10	41	0.70	50
AIML-1206-5R6	5.6	J, K	55	4	38	0.75	25
AIML-1206-6R8	6.8	J, K	55	4	34	0.75	25
AIML-1206-8R2	8.2	J, K	55	4	31	0.80	25
AIML-1206-100	10.0	J, K	55	2	28	0.80	25
AIML-1206-120	12.0	J, K	55	2	26	0.90	15
AIML-1206-150	15.0	J, K	40	1	23	0.80	5
AIML-1206-180	18.0	J, K	40	1	21	0.80	5
AIML-1206-220	22.0	J, K	40	1	19	0.90	5
AIML-1206-270	27.0	J, K	40	1	17	0.90	5

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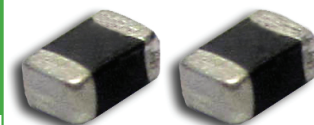
30332 Esperanza, Rancho Santa Margarita, California 92688  
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# MULTILAYER FERRITE CHIP INDUCTOR

AIML-1206



RoHS  
Compliant



3.2 x 1.6 x 1.1 mm

Part No. AIML-1206- Inductance Code	L( $\mu$ H)	Tolerance	Q (min)	Test Freq.	SRF(MHz)	DCR( $\Omega$ )	Ir(mA)
		(%)		(MHz)	(min)	(max)	(max)
AIML-1206-330	33.0	J, K	40	1	16	1.05	5
AIML-1206-390	39.0	J, K	40	1	12.5	2.00	5
AIML-1206-470	47.0	J, K	40	1	11.5	2.00	5
AIML-1206-560	56.0	J, K	40	1	10.5	2.50	4
AIML-1206-680	68.0	J, K	40	1	10.5	2.50	4
AIML-1206-820	82.0	J, K	40	1	10.0	3.00	4
AIML-1206-101	100	J, K	30	1	9.0	3.00	4
AIML-1206-121	120	J, K	30	1	7.0	3.50	2
AIML-1206-151	150	J, K	30	1	6.5	3.80	2
AIML-1206-181	180	J, K	30	1	6.0	4.00	2
AIML-1206-221	220	J, K	30	1	5.5	4.00	2

## Test Conditions and equipments

**Q:** HP4291 Impedance Analyzer, 50mV

**DCR:** HP4263A LCR meter

**SRF:** HP4291 Impedance analyzer

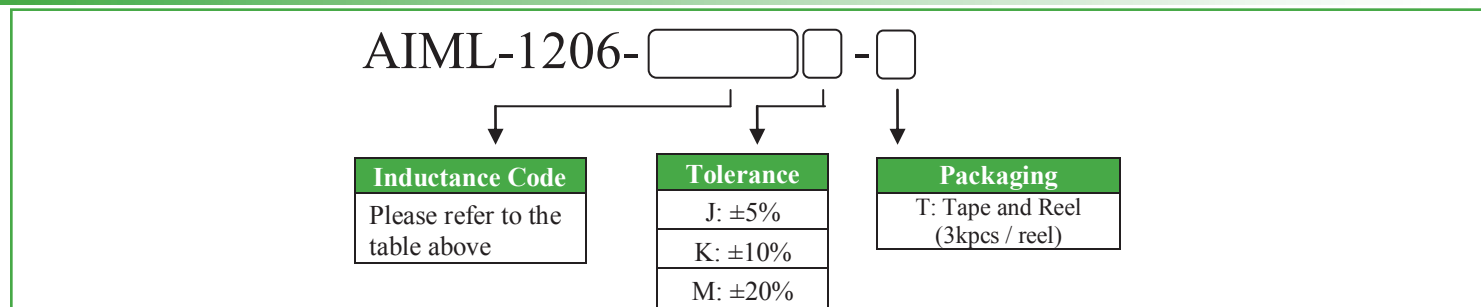
**Ir:** HP4291 Impedance Analyzer, DC power HP6632 and Adapter HP16200.  $\Delta L/L$  (initial)  $\geq -5\%$

## Unless otherwise specified

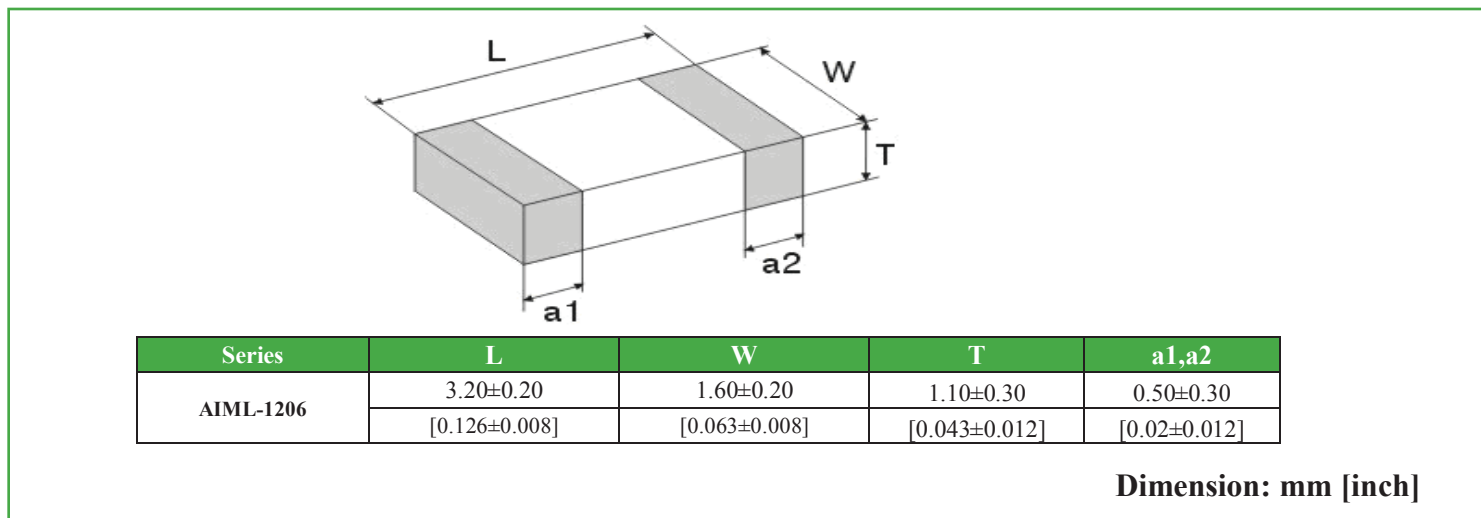
**Temperature :** Ordinary Temperature ( 5 to 35°C)

**Humidity :** Ordinary Humidity (25 to 85% RH)

## PART IDENTIFICATION:



## OUTLINE DIMENSION:

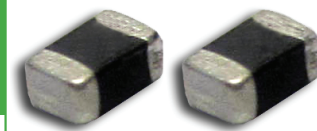


# MULTILAYER FERRITE CHIP INDUCTOR

AIML-1206

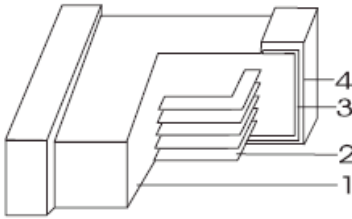


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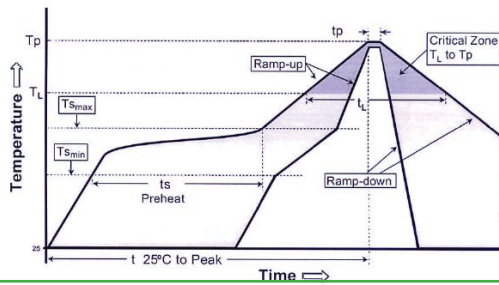
3.2 x 1.6 x 1.1 mm

## 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

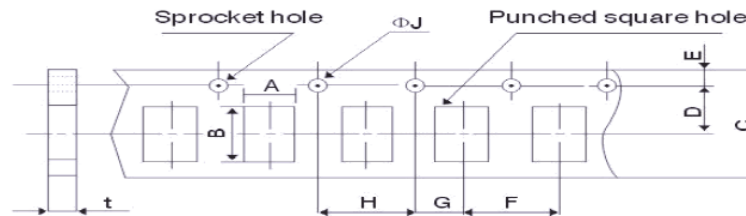
## REFLOW PROFILE:



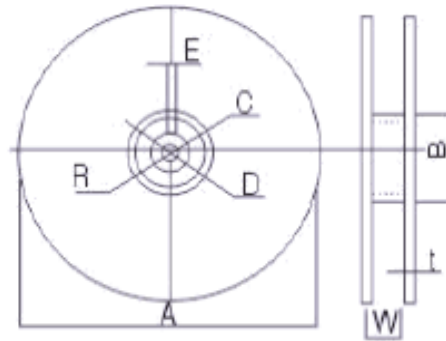
Profile Feature	Lead-Free Assembly
Average Ramp-Up Rate (Tmax to T <sub>p</sub> )	3°C/second max.
Preheat	150 °C 200 °C
- Temperature Min (T <sub>min</sub> ) - Temperature Max (T <sub>max</sub> ) - Time (t <sub>min to tmax</sub> ) min to tmax)	60-180 seconds
Time maintained above: - Temperature (T <sub>L</sub> ) - Time (t <sub>L</sub> )	217 °C 60-150 seconds
Peak-Classification Temperature (T <sub>p</sub> )	260 °C
Peak-Classification Time (T <sub>p</sub> )	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:

T: 3,000pcs / reel



Codes	A	B	C	D	E	F	G	H	ΦJ	t(max)
AIML-1206	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	B	C	D	E	W	t	R
178±2	60±2	13.0±0.5	21.0±0.8	2.0±0.5	10.0±1.15	1.2±0.2	1.0±0.25

Dimension: mm

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