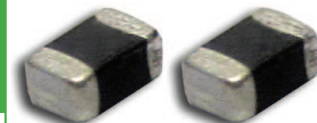


# MULTILAYER FERRITE CHIP INDUCTOR



2.00 x 1.25 x 0.85 mm/  
2.00 x 1.25 x 1.25 mm

**AIML-0805**

**RoHS**  
Compliant

**MSL level: 2A (This product is packed with dry packaging)**

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

### Test Conditions and equipments

**L, Q:** HP4291 Impedance Analyzer

**DCR:** HP4263A LCR meter

**SRF:** HP4291 Impedance analyzer

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

Part No. AIML-0805- Inductance Code	L( $\mu$ H)	Tolerance	Q (min)	Test Freq.	SRF(MHz)	DCR( $\Omega$ )	Ir(mA)
		(%)		(MHz)	(min)	(max)	(max)
AIML-0805-R047	0.047	K	15	50	350	0.20	300
AIML-0805-R056	0.056	K	15	50	350	0.20	300
AIML-0805-R068	0.068	K	15	50	280	0.20	300
AIML-0805-R082	0.082	K	15	50	255	0.20	300
AIML-0805-R10	0.100	K	20	25	235	0.30	250
AIML-0805-R12	0.120	K	20	25	220	0.30	250
AIML-0805-R15	0.150	K	20	25	200	0.40	250
AIML-0805-R18	0.180	K	20	25	185	0.40	250
AIML-0805-R22	0.220	K	20	25	170	0.50	250
AIML-0805-R27	0.270	K	20	25	150	0.50	250
AIML-0805-R33	0.330	K	20	25	145	0.55	250
AIML-0805-R39	0.390	K	25	25	135	0.65	200
AIML-0805-R47	0.470	K	25	25	125	0.65	200
AIML-0805-R56	0.560	K	25	25	115	0.75	150
AIML-0805-R68	0.680	K	25	25	105	0.80	150
AIML-0805-R82	0.820	K	25	25	100	1.00	150
AIML-0805-1R0	1.000	K	45	10	75	0.40	50
AIML-0805-1R2	1.200	K	45	10	65	0.50	50
AIML-0805-1R5	1.500	K	45	10	60	0.50	50
AIML-0805-1R8	1.800	K	45	10	55	0.60	50
AIML-0805-2R2	2.200	K	45	10	50	0.65	30
AIML-0805-2R7	2.700	K	45	10	45	0.75	30
AIML-0805-3R3	3.300	K	45	10	41	0.80	30
AIML-0805-3R9	3.900	K	45	10	38	0.90	30
AIML-0805-4R7	4.700	K	45	10	35	1.00	30
AIML-0805-5R6	5.600	K	55	4	32	0.90	15
AIML-0805-6R8	6.800	K	55	4	29	1.00	15
AIML-0805-8R2	8.200	K	55	4	26	1.10	15
AIML-0805-100	10.000	K	55	2	24	1.15	15
AIML-0805-120	12.000	K	55	2	22	1.25	15
AIML-0805-150	15.000	K	40	1	19	0.80	5
AIML-0805-180	18.000	K	40	1	18	0.90	5
AIML-0805-220	22.000	K	40	1	16	1.10	5
AIML-0805-270	27.000	K	25	1	14	1.15	5
AIML-0805-330	33.000	K	25	1	13	1.25	5
AIML-0805-390	39.000	K	25	1	13	1.50	4

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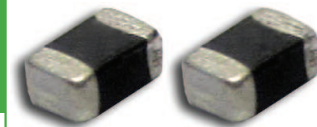
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**Revised: 10.11.12**

# MULTILAYER FERRITE CHIP INDUCTOR



2.00 x 1.25 x 0.85 mm/  
2.00 x 1.25 x 1.25 mm

AIML-0805

**RoHS**  
Compliant

## OPTIONS AND PART IDENTIFICATION:

AIML-0805---

### Inductance Code

Please refer to the table above

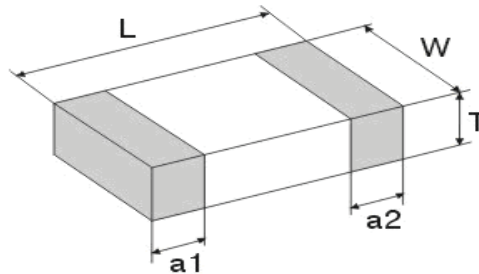
### Tolerance

K:  $\pm 10\%$

### Packaging

T: Tape and Reel  
(4kpcs / reel for L less than 12 $\mu$ H;  
3kpcs / reel for 12 $\mu$ H or above)

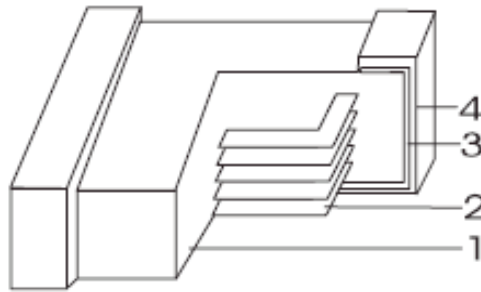
## OUTLINE DRAWING:



Dimension: mm [inch]

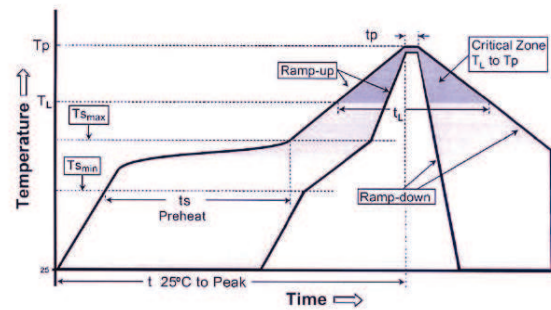
L	W	T	a1,a2
2.00 $\pm$ 0.20 [0.079 $\pm$ 0.008]	1.25 $\pm$ 0.20 [0.049 $\pm$ 0.008]	0.85 $\pm$ 0.20 [0.033 $\pm$ 0.008] for L less than 12 $\mu$ H; 1.25 $\pm$ 0.20 [0.049 $\pm$ 0.008] for 12 $\mu$ H or above	0.50 $\pm$ 0.30 [0.02 $\pm$ 0.012]

## 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 <sub>smax</sub> to T <sub>p</sub> )	3°C /second max.
Preheat - Temperature Min (T <sub>smin</sub> ) - Temperature Max (T <sub>smax</sub> ) - Time (t <sub>s</sub> from t <sub>smin</sub> to t <sub>smax</sub> )	150 °C 200 °C 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> ) 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.

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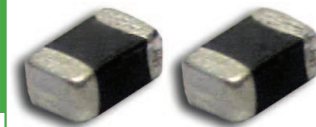


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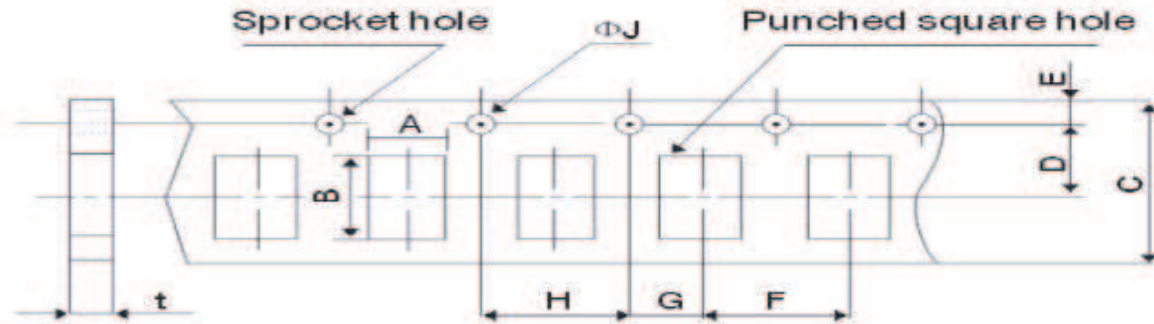
2.00 x 1.25 x 0.85 mm/  
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AIML-0805

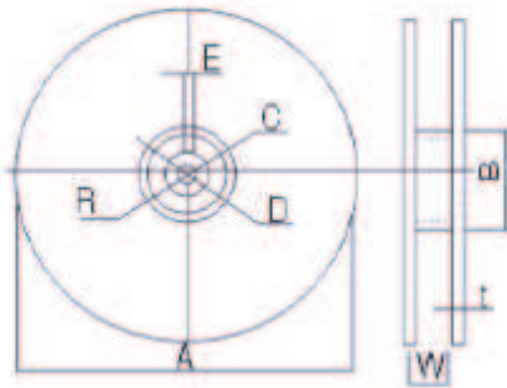
RoHS  
Compliant

## TAPE & REEL:

T: 4,000pcs / reel for L less than 12μH (paper tape); 3,000pcs / reel for 12μH or above (embossed tape)



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	1.1±0.05 for L less than 12μH; 1.0±0.05 for 12μH or above



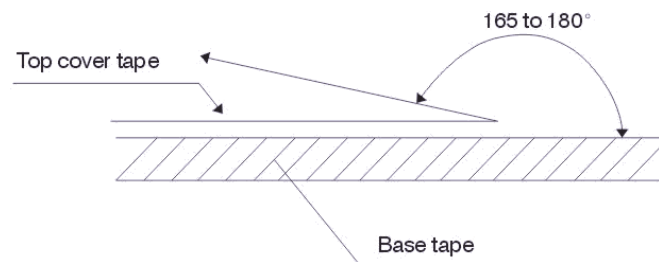
A	178±2
B	60±2
C	13.0±0.5
D	21.0±0.8
E	2.0±0.5
W	10.0±1.15
t	1.2±0.2
R	1.0±0.25

### Peeling strength of cover tape

0.3~0.7N (30gf~70gf)

Test condition:

- 1) peel angle: 165°~180° vs. carrier tape.
- 2) peel speed: 300 mm/min±10%.



Dimension: mm

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