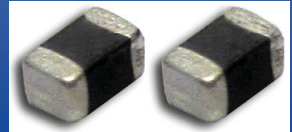


Multilayer Ferrite Chip Inductor



AIML-0805 Series

Request Samples



Check Inventory



2.0 x 1.25 x 0.85mm
2.0 x 1.25 x 1.25mm
RoHS/RoHS II Compliant
MSL Level = 1

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

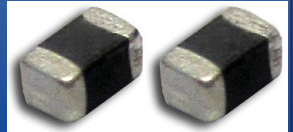
Applications

- Resonance circuits, traps and filters
- RF choke for wireless phones and radio equipment
- Communications, video and audio equipment, computers and remote controllers.

Electrical Specifications

| Part No. | L(μ H) | Tolerance | Q | Test Freq. | SRF | DCR | Ir |
|----------------|-------------|-----------|-------|------------|-------|--------------|------|
| | | (%) | (min) | (MHz) | (MHz) | (Ω) | (mA) |
| AIML-0805-R047 | 0.047 | K | 15 | 50 | 320 | 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 | 95 | 0.40 | 50 |
| AIML-0805-1R2 | 1.200 | K | 45 | 10 | 85 | 0.50 | 50 |
| AIML-0805-1R5 | 1.500 | K | 45 | 10 | 80 | 0.50 | 50 |
| AIML-0805-1R8 | 1.800 | K | 45 | 10 | 75 | 0.60 | 50 |
| AIML-0805-2R2 | 2.200 | K | 45 | 10 | 70 | 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 | 50 | 4 | 32 | 0.90 | 15 |
| AIML-0805-6R8 | 6.800 | K | 50 | 4 | 29 | 1.00 | 15 |
| AIML-0805-8R2 | 8.200 | K | 50 | 4 | 26 | 1.10 | 15 |
| AIML-0805-100 | 10.000 | K | 50 | 2 | 24 | 1.15 | 15 |
| AIML-0805-120 | 12.000 | K | 50 | 2 | 22 | 1.25 | 15 |
| AIML-0805-150 | 15.000 | K | 30 | 1 | 19 | 0.80 | 5 |
| AIML-0805-180 | 18.000 | K | 30 | 1 | 18 | 0.90 | 5 |

Multilayer Ferrite Chip Inductor



AIML-0805 Series

Request Samples



Check Inventory



2.0 x 1.25 x 0.85mm
2.0 x 1.25 x 1.25mm
RoHS/RoHS II Compliant
MSL Level = 1

| Part No. | L(μ H) | Tolerance | Q | Test Freq. | SRF (MHz) | DCR (Ω) | Ir (mA) |
|---------------|-------------|-----------|-------|------------|-----------|------------------|---------|
| | | (%) | (min) | (MHz) | (min) | $\pm 30\%$ | (max) |
| AIML-0805-220 | 22.000 | K | 30 | 1.0 | 16 | 1.10 | 5 |
| AIML-0805-270 | 27.000 | K | 30 | 1.0 | 14 | 1.15 | 5 |
| AIML-0805-330 | 33.000 | K | 30 | 0.4 | 13 | 1.25 | 5 |
| AIML-0805-390 | 39.000 | K | 35 | 2.0 | 8 | 2.90 | 4 |
| AIML-0805-470 | 47.000 | K | 25 | 2.0 | 7.5 | 3.00 | 4 |

Operating Temperature Range: -55°C to + 125°C

Storage Temperature Range: -55°C to + 125°C

Test Conditions and equipment

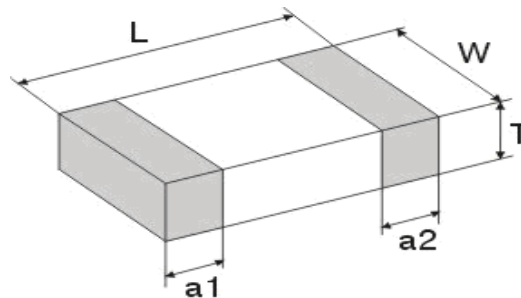
L, Q: HP4291 Impedance Analyzer DCR: HP4263A LCR meter

SRF: HP4291 Impedance analyzer

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) $\geq -5\%$

Mechanical Specifications



| L | W | T | a1, a2 |
|--|--|--|---------------------------------------|
| 2.00 +0.3/-0.1 [0.079 + 0.012/-0.004] | 1.25 \pm 0.20 [0.049 \pm 0.008] | 0.85 \pm 0.20 [0.033 \pm 0.008] for L less than 27 μ H; 1.25 \pm 0.20 [0.049 \pm 0.008] for 27 μ H or above | 0.50 \pm 0.30 [0.02 \pm 0.012] |

Dimensions: mm[inches]

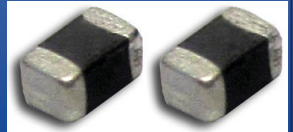


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Multilayer Ferrite Chip Inductor



AIML-0805 Series

Request Samples

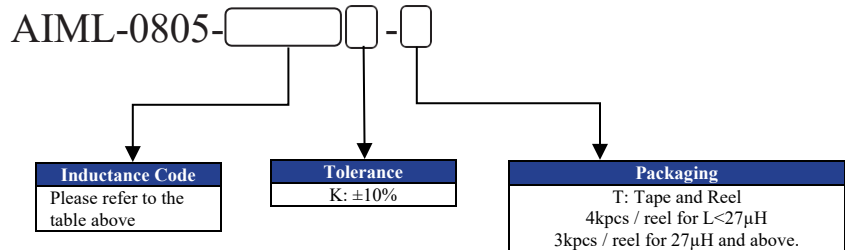


Check Inventory

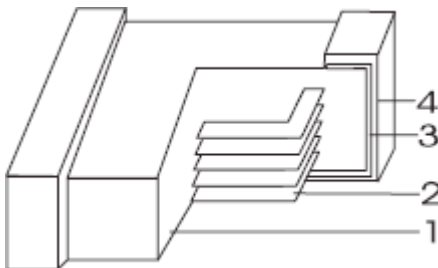


2.0 x 1.25 x 0.85mm
 2.0 x 1.25 x 1.25mm
RoHS/RoHS II Compliant
 MSL Level = 1

Part Identification

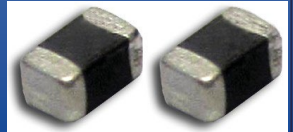


Materials



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

Multilayer Ferrite Chip Inductor



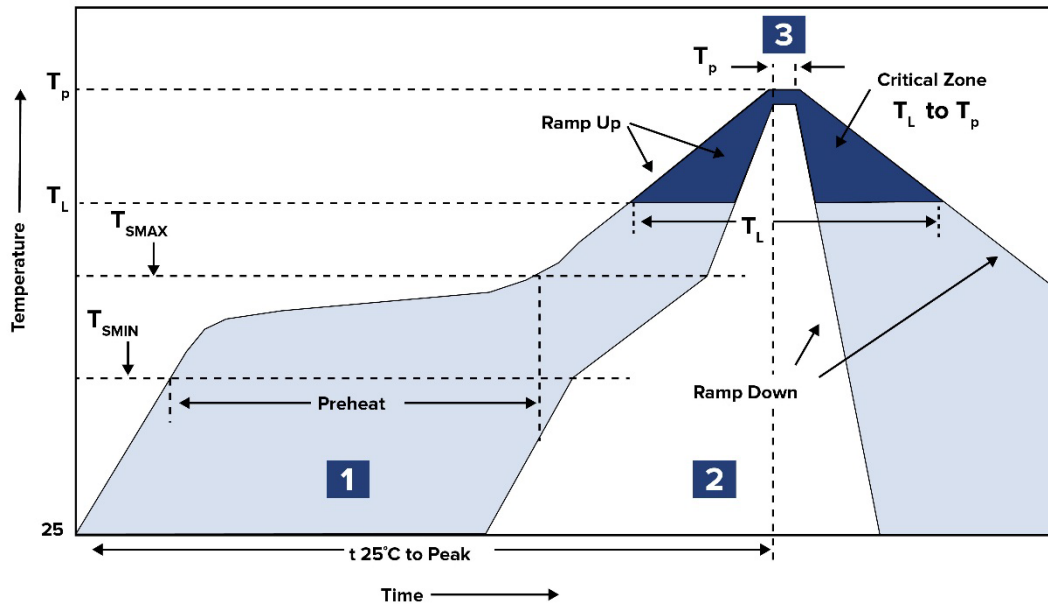
AIML-0805 Series

Request Samples

Check Inventory

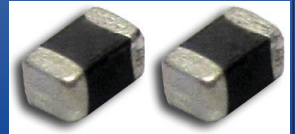
2.0 x 1.25 x 0.85mm
 2.0 x 1.25 x 1.25mm
 RoHS/RoHS II Compliant
 MSL Level = 1

Reflow Profile



| Zone | Description | Temperature | Times |
|---------------------------------|-------------|---|---------------|
| 1 | Preheat | $T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C | 60 ~ 120 sec. |
| 2 | Reflow | T_L 217°C | 60 ~ 90 sec. |
| 3 | Peak heat | T_p 260°C | 10 sec. MAX |
| T(25°C) to Peak: 8 minutes max. | | | |

Multilayer Ferrite Chip Inductor



AIML-0805 Series

Request Samples

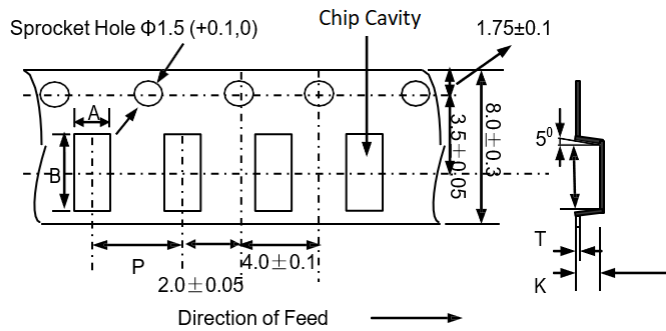
Check Inventory

2.0 x 1.25 x 0.85mm
 2.0 x 1.25 x 1.25mm
 RoHS/RoHS II Compliant
 MSL Level = 1

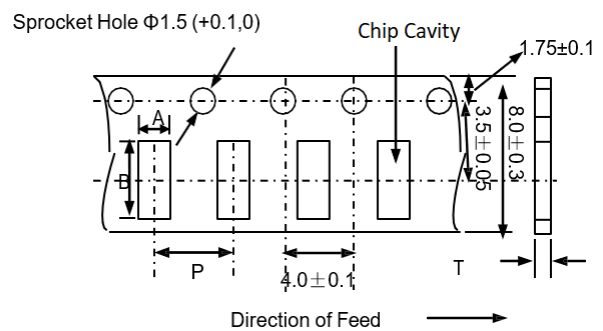
Packaging

T: 4,000pcs / reel for L less than 27μH (paper tape); 3,000pcs / reel for 27μH or above (embossed tape)

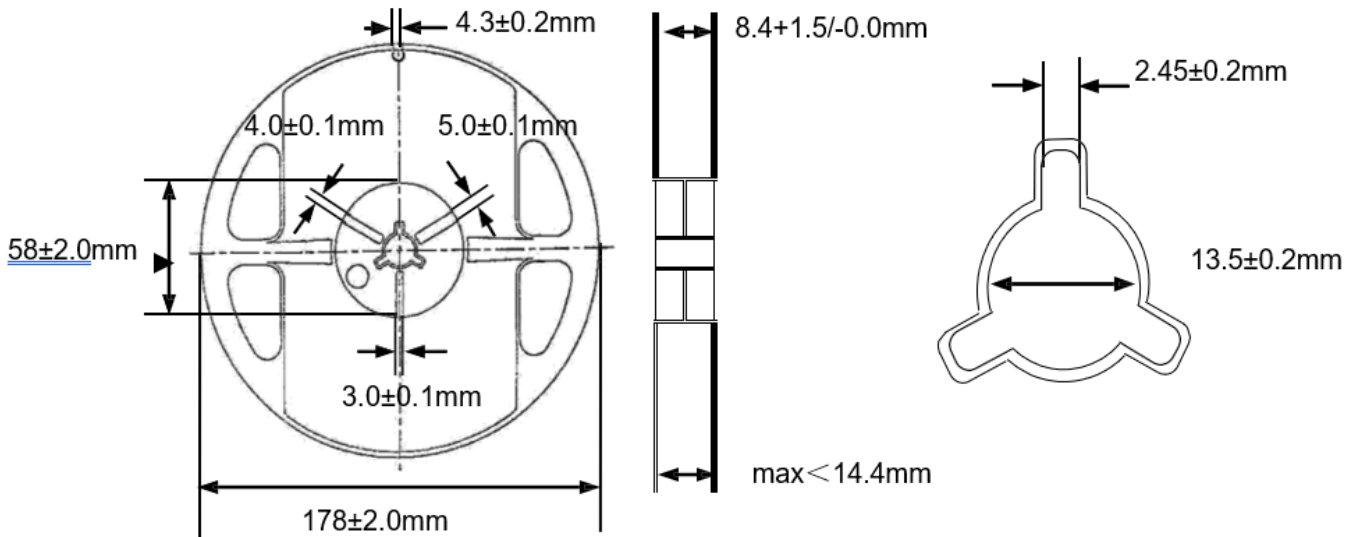
Embossed Tape



Paper Tape



| Tape Type | A | B | P | Kmax | Tmax |
|-----------|----------|----------|---------|------|----------|
| Embossed | 1.55±0.2 | 2.25±0.2 | 4.0±0.1 | 1.45 | 0.3 |
| Paper | 1.50±0.2 | 2.3±0.2 | 4.0±0.1 | N/A | 1.1±0.05 |



Dimensions: mm

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