

MULTILAYER FERRITE CHIP INDUCTOR

AIML-0402



RoHS
Compliant



1.0 x 0.5 x 0.5mm

FEATURES:

- Monolithic construction, compact size, & lightweight
- No cross coupling between inductors due to magnetic shield
- Excellent solderability and heat resistance for reflow soldering

APPLICATIONS:

- Resonance circuit, traps, filter circuits
- Other high frequency circuits
- RF choke, cordless phones, and radio equipment
- High frequency telecommunication circuits

STANDARD SPECIFICATIONS:

| Part No. | L(nH) | Tolerance (nH or %) | L,Q Test Freq. (MHz) | Q (MIN) | SRF(MHz) (min) | DCR(Ω) (max) | Ir(mA) (max) |
|---------------|-------|-------------------------------|----------------------------|---------|-------------------|--------------------------|-----------------|
| AIML-0402-47N | 47.0 | J: $\pm 5\%$ K: $\pm 10\%$ | 50 | 10 | 220 | 0.45 | 25 |
| AIML-0402-56N | 56.0 | | 50 | 10 | 220 | 0.45 | 25 |
| AIML-0402-68N | 68.0 | | 50 | 10 | 210 | 0.45 | 25 |
| AIML-0402-82N | 82.0 | | 50 | 10 | 200 | 0.45 | 25 |
| AIML-0402-R10 | 100.0 | | 25 | 15 | 200 | 0.7 | 25 |
| AIML-0402-R12 | 120.0 | | 25 | 15 | 165 | 0.7 | 25 |
| AIML-0402-R15 | 150.0 | | 25 | 15 | 140 | 0.9 | 25 |
| AIML-0402-R18 | 180.0 | | 25 | 15 | 120 | 1.1 | 25 |
| AIML-0402-R22 | 220.0 | | 25 | 15 | 110 | 1.2 | 25 |
| AIML-0402-R27 | 270.0 | | 25 | 15 | 95 | 1.2 | 25 |
| AIML-0402-R33 | 330.0 | | 25 | 15 | 85 | 1.25 | 18 |
| AIML-0402-R39 | 390.0 | | 25 | 15 | 70 | 1.5 | 18 |
| AIML-0402-R47 | 470 | | 25 | 20 | 68 | 2 | 18 |
| AIML-0402-R56 | 560 | | 25 | 20 | 55 | 2.35 | 18 |
| AIML-0402-R68 | 680 | | 25 | 20 | 50 | 2.55 | 18 |
| AIML-0402-R82 | 820 | | 25 | 20 | 45 | 3.15 | 18 |
| AIML-0402-1R0 | 1000 | | 10 | 20 | 40 | 0.9 | 15 |
| AIML-0402-1R2 | 1200 | | 10 | 20 | 35 | 1.2 | 15 |
| AIML-0402-1R5 | 1500 | | 10 | 20 | 30 | 1.2 | 15 |
| AIML-0402-1R8 | 1800 | | 10 | 20 | 30 | 1.45 | 15 |
| AIML-0402-2R2 | 2200 | | 10 | 20 | 28 | 1.75 | 10 |
| AIML-0402-2R7 | 2700 | | 10 | 20 | 22 | 2 | 10 |
| AIML-0402-3R3 | 3300 | | 10 | 20 | 20 | 2.35 | 10 |
| AIML-0402-3R9 | 3900 | | 10 | 20 | 18 | 2.55 | 10 |
| AIML-0402-4R7 | 4700 | | 10 | 20 | 15 | 3.15 | 10 |
| AIML-0402-5R6 | 5600 | | 4 | 20 | 13 | 2.35 | 3 |
| AIML-0402-6R8 | 6800 | | 4 | 20 | 11 | 2.55 | 3 |
| AIML-0402-8R2 | 8200 | | 4 | 20 | 10 | 3.15 | 3 |
| AIML-0402-100 | 10000 | | 2 | 20 | 9 | 3.45 | 2 |

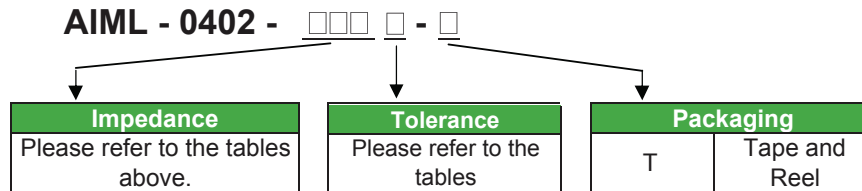
PARAMETERS

| | |
|------------------------|------------------|
| ABRACON P/N: | AIML-0402-xxx |
| Operating temperature: | -55°C to + 125°C |
| Storage temperature: | -55°C to + 125°C |

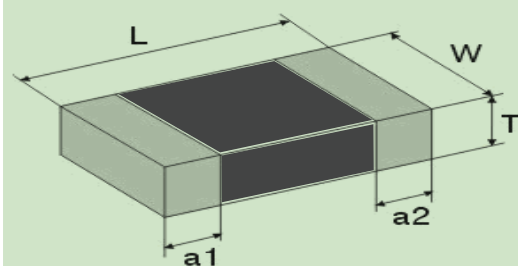
Ir: Inductance change shall be within $\pm 5\%$ when the allowable current is applied

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)



OUTLINE DRAWING:



Dimensions: Inches
(mm)

| Series | L | W | T | a1,a2 |
|-----------|-------------------|-------------------|-------------------|-------------------|
| AIML-0402 | 0.04 \pm 0.006 | 0.02 \pm 0.006 | 0.02 \pm 0.006 | 0.01 \pm 0.004 |
| | (1.00 \pm 0.15) | (0.50 \pm 0.15) | (0.50 \pm 0.15) | (0.25 \pm 0.10) |

ABRACON IS
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ABRACON
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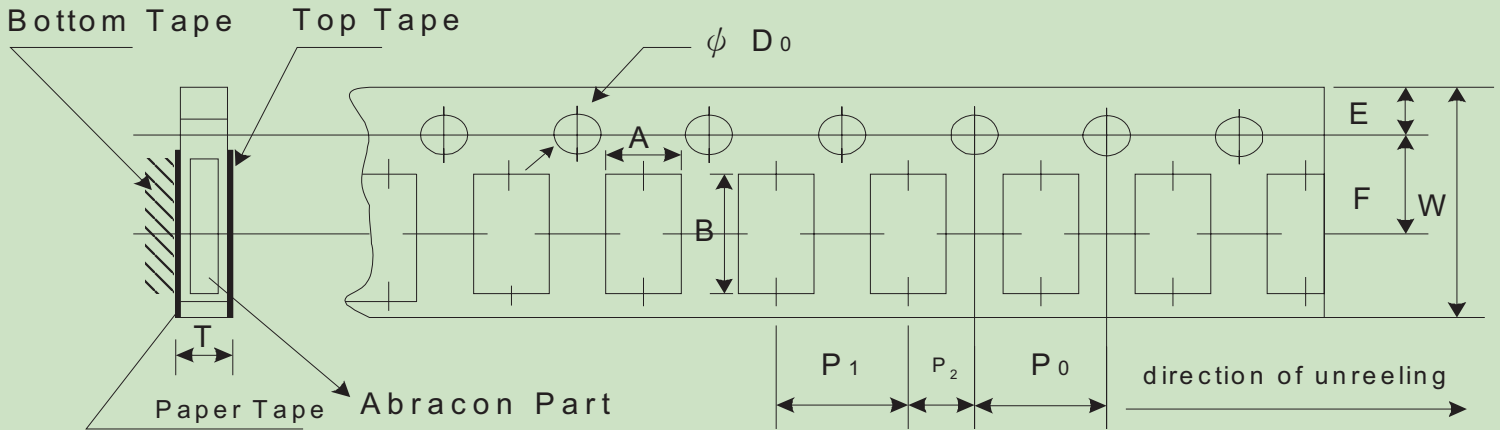


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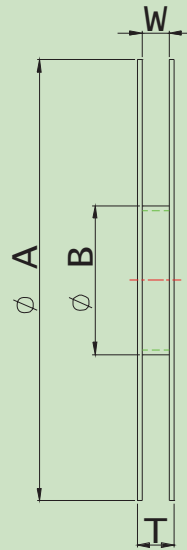
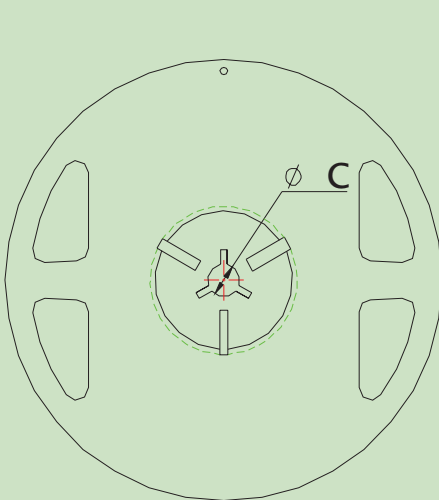
1.0 x 0.5 x 0.5mm

▶ **TAPE & REEL:** Tape and reel 10,000pcs/reel



| Codes | A | B | W | E | F |
|-----------|-----------|-----------|-----------|-----------|----------|
| AIML-0402 | 0.65±0.05 | 1.30±0.05 | 8.00±0.10 | 1.75±0.05 | 3.5±0.05 |

| Codes | P ₀ | P ₁ | P ₂ | ΦD ₀ | T |
|-----------|----------------|----------------|----------------|-----------------|-----------|
| AIML-0402 | 2.00±0.10 | 4.00±0.05 | 2.00±0.05 | 1.55±0.05 | 0.80±0.05 |



| | mm |
|---|-----------|
| A | 178±2 |
| B | 60±2 |
| C | 13.0±0.5 |
| W | 10.0±1.15 |
| T | 12.0±1.0 |

Dimensions: mm

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