

# MULTILAYER CHIP CERAMIC INDUCTORS

AIMC-0201

RoHS  
Compliant



0.6 x 0.3 x 0.3mm

## FEATURES:

- High self-resonant frequency
- Multilayer monolithic construction yields high reliability
- Excellent solderability & heat resistance for reflow soldering

## APPLICATIONS:

- Bluetooth
- Mobile phones such as GSM, CDMA, PDC
- High frequency telecommunication circuits
- Other high frequency circuit general use

## STANDARD SPECIFICATIONS:

### PARAMETERS

|                        |                      |
|------------------------|----------------------|
| ABRACON P/N:           | AIMC-0201-xxx Series |
| Operating temperature: | -55°C to + 125°C     |
| Storage temperature:   | -55°C to + 125°C     |

| Part No.      | L(nH) | Tolerance | Q (MIN @ 100MHz) | Q (MIN @ 800MHz) | Q (MIN @ 1800MHz) | L,Q Test Freq. (MHz) | SRF(MHz) | DCR(Ω) | Ir(mA) |
|---------------|-------|-----------|------------------|------------------|-------------------|----------------------|----------|--------|--------|
| AIMC-0201-1N0 | 1.0   | S         | 4                | 12               | 19                | 100                  | 12000    | 0.20   | 300    |
| AIMC-0201-1N2 | 1.2   | S         | 4                | 12               | 18                | 100                  | 11000    | 0.22   | 300    |
| AIMC-0201-1N5 | 1.5   | S         | 4                | 12               | 18                | 100                  | 11000    | 0.24   | 300    |
| AIMC-0201-1N8 | 1.8   | S         | 4                | 11               | 17                | 100                  | 10000    | 0.27   | 300    |
| AIMC-0201-2N2 | 2.2   | S         | 4                | 12               | 19                | 100                  | 10000    | 0.30   | 300    |
| AIMC-0201-2N7 | 2.7   | S         | 4                | 13               | 19                | 100                  | 10000    | 0.35   | 300    |
| AIMC-0201-3N3 | 3.3   | S         | 4                | 13               | 19                | 100                  | 10000    | 0.40   | 200    |
| AIMC-0201-3N9 | 3.9   | S         | 4                | 13               | 19                | 100                  | 9000     | 0.45   | 200    |
| AIMC-0201-4N7 | 4.7   | S         | 5                | 13               | 19                | 100                  | 8500     | 0.50   | 200    |
| AIMC-0201-5N6 | 5.6   | S         | 5                | 12               | 18                | 100                  | 8500     | 0.60   | 200    |
| AIMC-0201-6N8 | 6.8   | J         | 5                | 13               | 19                | 100                  | 6000     | 0.65   | 200    |
| AIMC-0201-8N2 | 8.2   | J         | 5                | 13               | 19                | 100                  | 6000     | 0.70   | 200    |
| AIMC-0201-10N | 10    | J         | 5                | 13               | 18                | 100                  | 5500     | 0.80   | 200    |
| AIMC-0201-12N | 12    | J         | 5                | 12               | 18                | 100                  | 5000     | 1.00   | 150    |
| AIMC-0201-15N | 15    | J         | 5                | 12               | 17                | 100                  | 4500     | 1.10   | 150    |
| AIMC-0201-18N | 18    | J         | 5                | 12               | 16                | 100                  | 4000     | 1.30   | 100    |
| AIMC-0201-22N | 22    | J         | 5                | 12               | 16                | 100                  | 3500     | 1.60   | 100    |
| AIMC-0201-27N | 27    | J         | 5                | 12               | 15                | 100                  | 3000     | 1.70   | 100    |
| AIMC-0201-33N | 33    | J         | 5                | 11               | 14                | 100                  | 2800     | 1.80   | 100    |
| AIMC-0201-39N | 39    | J         | 4                | 11               | -                 | 100                  | 1800     | 3.35   | 60     |
| AIMC-0201-47N | 47    | J         | 4                | 11               | -                 | 100                  | 1600     | 3.60   | 50     |

### Test Conditions

L, Q: HP4291 Impedance Analyzer, 100MHz, 50mV

DCR: HP4263A LCR meter

SRF: HP4291 Impedance analyzer, HP8753 Network analyzer

Ir: DC Power Supplier, Current Meter, Thermometer.

ΔL/L (initial) ≥ -5% or ΔT ≤ 20°C

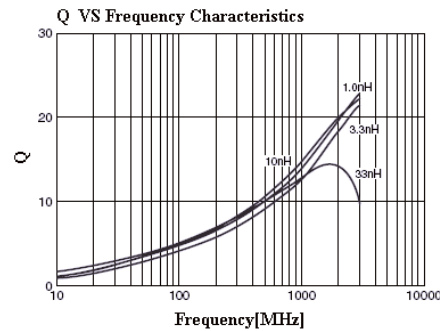
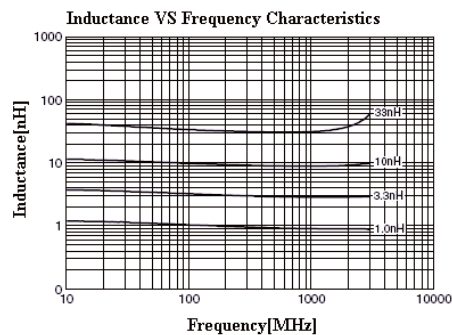
### Unless otherwise specified

Temperature : Ordinary Temperature ( 5 to 35°C)

Humidity : Ordinary Humidity (25 to 85% RH)

Atmospheric Pressure : 86 to 106 kPa

## ELECTRICAL CHARACTERISTICS:



## OPTIONS AND PART IDENTIFICATION: (Left blank if standard)

AIMC-0201-     -  

### Inductance Code

Please refer to  
Electrical Spec table

### Tolerance

S: ±0.3nH\*  
J: ±5%\*

### Packaging

T: Tape and Reel (15kpcs / reel)

\*S for L = 1.0~5.6nH only  
J for L = 6.8~47nH only

ABRACON IS  
ISO 9001:2008  
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AIMC-0201

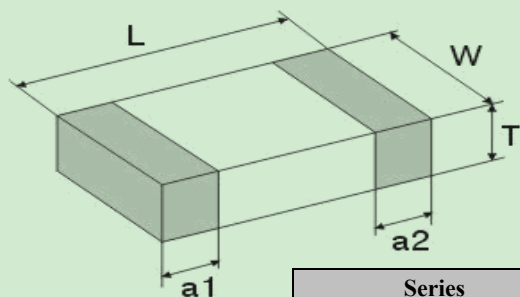
RoHS  
Compliant



0.6 x 0.3 x 0.3mm

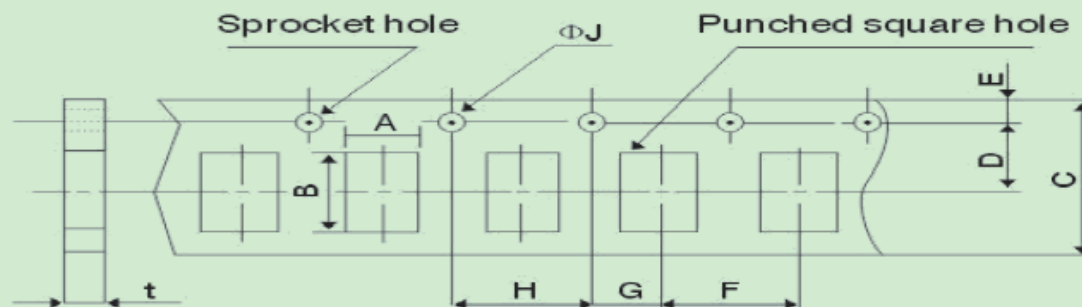
## OUTLINE DRAWING:

Dimension: mm [inch]

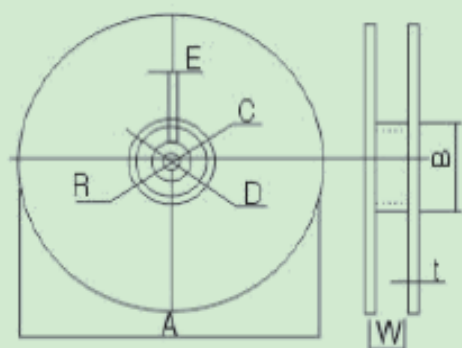


| Series    | L             | W             | T             | a1,a2         |
|-----------|---------------|---------------|---------------|---------------|
| AIMC-0201 | 0.60±0.05     | 0.30±0.05     | 0.30±0.05     | 0.10~0.20     |
|           | [0.024±0.002] | [0.012±0.002] | [0.012±0.002] | [0.004~0.008] |

## TAPE & REEL: T = Tape and reel 15,000pcs/reel



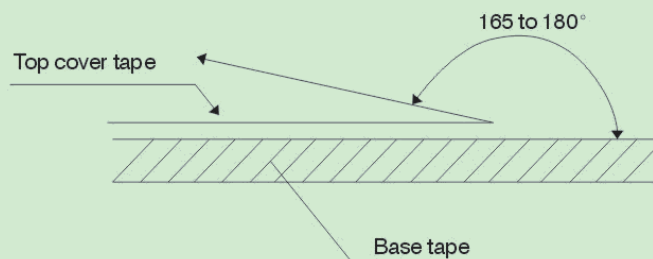
| Codes     | A        | B        | C       | D        | E        | F        | G        | H       | ΦJ         | t(max)    |
|-----------|----------|----------|---------|----------|----------|----------|----------|---------|------------|-----------|
| AIMC-0201 | 0.4±0.05 | 0.7±0.05 | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 2.0±0.05 | 2.0±0.05 | 4.0±0.1 | 1.5+0.1/-0 | 0.55±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  |

### 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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## ABRACON:

[AIMC-0201-10NJ-T](#) [AIMC-0201-12NJ-T](#) [AIMC-0201-15NJ-T](#) [AIMC-0201-18NJ-T](#) [AIMC-0201-1N0S-T](#) [AIMC-0201-1N2S-T](#) [AIMC-0201-1N5S-T](#) [AIMC-0201-1N8S-T](#) [AIMC-0201-2N2S-T](#) [AIMC-0201-2N7S-T](#) [AIMC-0201-3N3S-T](#) [AIMC-0201-3N9S-T](#) [AIMC-0201-4N7S-T](#) [AIMC-0201-5N6S-T](#) [AIMC-0201-6N8S-T](#) [AIMC-0201-8N2S-T](#)