

# SURFACE-MOUNT CERAMIC CHIP INDUCTORS

## AIMC SERIES

### 0603

#### FEATURES:

- Construction: Ceramic
- High Frequency Design
- Avoid Crosstalk
- Excellent Q values
- Excellent SRF
- High Reliability
- Excellent Thermal Stability

#### OPTIONS:

- Tape & Reel is Standard (Qty: 4000 pcs.)  
Bulk Packaging Available for Smaller Quantities
- Tolerance: J=5%, K=10% is standard  
Tighter Tolerances Available

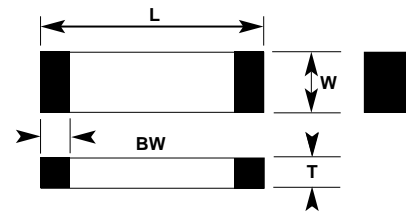
#### COMMON APPLICATIONS:

- Modems
- Mobile Radios
- Cordless Telephones
- Global Positioning Systems
- Wireless Communications Equipment
- Networking System
- Computer Products and Peripherals

### STANDARD SPECIFICATIONS

| Part Number        | L (μH)<br>J=±5%<br>K=±10%<br>S=±0.3nH | Q<br>Min | L.Q Test<br>Freq<br>(MHz) | SRF<br>Min<br>(MHz) | RDC<br>Max<br>(Ω) | IDC<br>Max<br>(mA) |
|--------------------|---------------------------------------|----------|---------------------------|---------------------|-------------------|--------------------|
| <b>0603 Series</b> |                                       |          |                           |                     |                   |                    |
| AIMC-0603-R0015S   | 0.0015                                | 10       | 100                       | 10000               | 0.10              | 500                |
| AIMC-0603-R0018S   | 0.0018                                | 10       | 100                       | 9800                | 0.12              | 500                |
| AIMC-0603-R0022S   | 0.0022                                | 10       | 100                       | 7600                | 0.20              | 500                |
| AIMC-0603-R0027S   | 0.0027                                | 10       | 100                       | 7000                | 0.20              | 500                |
| AIMC-0603-R0033S   | 0.0033                                | 10       | 100                       | 6200                | 0.20              | 500                |
| AIMC-0603-R0039S   | 0.0039                                | 10       | 100                       | 5600                | 0.20              | 500                |
| AIMC-0603-R0047S   | 0.0047                                | 10       | 100                       | 4800                | 0.20              | 500                |
| AIMC-0603-R0056S   | 0.0056                                | 10       | 100                       | 4600                | 0.30              | 500                |
| AIMC-0603-R0068S   | 0.0068                                | 11       | 100                       | 4200                | 0.30              | 500                |
| AIMC-0603-R0082S   | 0.0082                                | 11       | 100                       | 3600                | 0.30              | 500                |
| AIMC-0603-R010J    | 0.010                                 | 11       | 100                       | 3200                | 0.50              | 300                |
| AIMC-0603-R012J    | 0.012                                 | 11       | 100                       | 2800                | 0.50              | 300                |
| AIMC-0603-R015J    | 0.015                                 | 11       | 100                       | 2600                | 0.60              | 300                |
| AIMC-0603-R018J    | 0.018                                 | 11       | 100                       | 2400                | 0.60              | 300                |
| AIMC-0603-R022J    | 0.022                                 | 11       | 100                       | 2000                | 0.60              | 300                |
| AIMC-0603-R027J    | 0.027                                 | 14       | 100                       | 1900                | 0.80              | 300                |
| AIMC-0603-R033J    | 0.033                                 | 14       | 100                       | 1600                | 0.80              | 300                |
| AIMC-0603-R039J    | 0.039                                 | 14       | 100                       | 1400                | 0.80              | 300                |
| AIMC-0603-R047J    | 0.047                                 | 14       | 100                       | 1200                | 1.00              | 300                |
| AIMC-0603-R056J    | 0.056                                 | 15       | 100                       | 1000                | 1.00              | 200                |
| AIMC-0603-R068J    | 0.068                                 | 15       | 100                       | 900                 | 1.00              | 200                |
| AIMC-0603-R082J    | 0.082                                 | 15       | 100                       | 800                 | 1.00              | 200                |
| AIMC-0603-R10J     | 0.100                                 | 15       | 50                        | 700                 | 1.00              | 200                |
| AIMC-0603-R12J     | 0.120                                 | 15       | 50                        | 600                 | 1.20              | 300                |
| AIMC-0603-R15J     | 0.150                                 | 15       | 50                        | 500                 | 1.20              | 300                |
| AIMC-0603-R18J     | 0.180                                 | 15       | 50                        | 400                 | 1.30              | 300                |
| AIMC-0603-R22J     | 0.220                                 | 15       | 50                        | 400                 | 1.20              | 300                |

### PHYSICAL CHARACTERISTICS



Dimensions: Inches (mm)

|                  | <b>AIMC-0603</b>          |
|------------------|---------------------------|
| Length (L)       | 0.063±0.006<br>(1.6±0.15) |
| Width (W)        | 0.031±0.006<br>(0.8±0.15) |
| Thickness (T)    | 0.031±0.006<br>(0.8±0.15) |
| Termination (BW) | 0.012±0.008<br>(0.3±0.2)  |

#### TECHNICAL INFORMATION:

- Testing: HP4291A
- Solderability: 90% of the terminal electrode shall be covered  
Preheat: @135°C±15°C for 60 seconds
- Solder Temperature: 230±5°C
- Operating Temperature: -55°C to +125°C

Note: All specifications subject to change without notice.