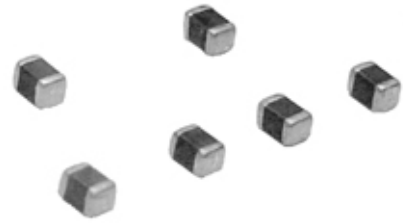


MULTILAYER CHIP INDUCTORS

FEATURES

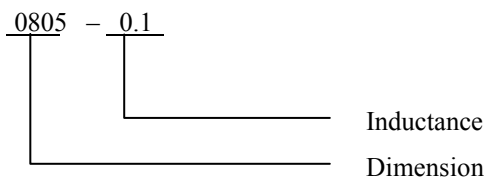
- ◆ Cost Effective
- ◆ Suitable for small portable equipment
- ◆ Supports operating frequency bands up to 6GHz with nominal inductance values from 1.0nH to 470nH



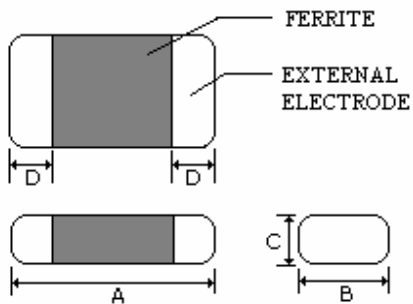
APPLICATIONS

- ◆ Wireless communication, Cellular phones and pagers
- ◆ Computers, PDAs and Radar detectors
- ◆ Telecommunications, Automotive electronics
- ◆ Keyless remote systems, Information technology equipments

ORDERING CODE



SHAPES



DIMENSIONS UNIT: mm (inch)

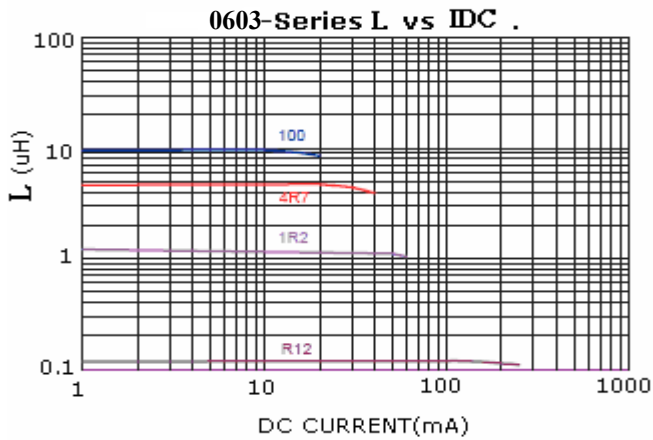
| Part No. | Dimensions | | | | Inductance (μ H) |
|----------|-----------------|-----------------|------------------------------------|-----------------|--------------------------|
| | A | B | C | D | |
| 0603 | 1.60 \pm 0.20 | 0.80 \pm 0.15 | 0.80 \pm 0.15 | 0.30 \pm 0.20 | 0.047~18 |
| 0805 | 2.00 \pm 0.20 | 1.25 \pm 0.20 | 0.85 \pm 0.20 or 1.25 \pm 0.20 | 0.50 \pm 0.30 | 0.047~33 |
| 1206 | 3.20 \pm 0.20 | 1.60 \pm 0.20 | 1.10 \pm 0.20 | 0.50 \pm 0.30 | 0.047~33 |

MULTILAYER CHIP INDUCTORS

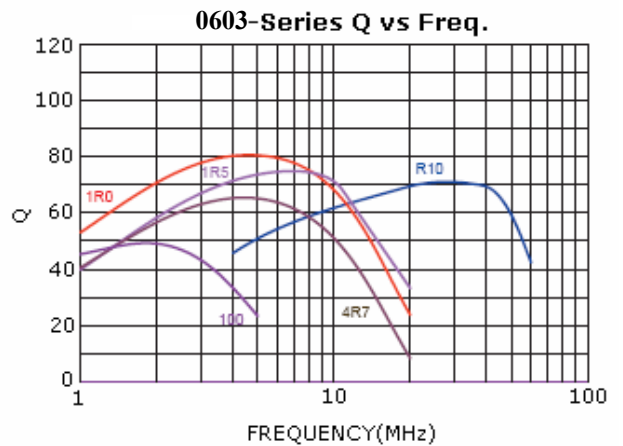
ELECTRICAL CHARACTERISTICS FOR 0603

| Part No. | Inductance (uH) | Test Freq. (MHz) | Q Min | Self Resonant FREQ. (MHz) Min | DC Resistance (Ω) Max | Rated Current (mA) Max |
|------------|-----------------|------------------|-------|-------------------------------|-----------------------|------------------------|
| 0603-0.047 | 0.047 | 50 | 15 | 260 | 0.30 | 50 |
| 0603-0.068 | 0.068 | 50 | 15 | 250 | 0.30 | 50 |
| 0603-0.082 | 0.082 | 50 | 15 | 245 | 0.30 | 50 |
| 0603-0.10 | 0.10 | 25 | 25 | 240 | 0.50 | 50 |
| 0603-0.12 | 0.12 | 25 | 25 | 205 | 0.50 | 50 |
| 0603-0.15 | 0.15 | 25 | 25 | 180 | 0.60 | 50 |
| 0603-0.18 | 0.18 | 25 | 25 | 165 | 0.60 | 50 |
| 0603-0.22 | 0.22 | 25 | 25 | 150 | 0.80 | 50 |
| 0603-0.27 | 0.27 | 25 | 25 | 136 | 0.80 | 50 |
| 0603-0.33 | 0.33 | 25 | 25 | 125 | 0.85 | 35 |
| 0603-0.39 | 0.39 | 25 | 25 | 110 | 1.00 | 35 |
| 0603-0.47 | 0.47 | 25 | 25 | 105 | 1.35 | 35 |
| 0603-0.56 | 0.56 | 25 | 25 | 95 | 1.55 | 35 |
| 0603-0.68 | 0.68 | 25 | 25 | 85 | 1.70 | 35 |
| 0603-0.82 | 0.82 | 25 | 25 | 75 | 2.10 | 35 |
| 0603-1.0 | 1.0 | 10 | 35 | 65 | 0.60 | 25 |
| 0603-1.2 | 1.2 | 10 | 35 | 60 | 0.80 | 25 |
| 0603-1.5 | 1.5 | 10 | 35 | 55 | 0.80 | 25 |
| 0603-1.8 | 1.8 | 10 | 35 | 50 | 0.95 | 25 |
| 0603-2.2 | 2.2 | 10 | 35 | 45 | 1.15 | 15 |
| 0603-2.7 | 2.7 | 10 | 35 | 40 | 1.35 | 15 |
| 0603-3.3 | 3.3 | 10 | 35 | 38 | 1.55 | 15 |
| 0603-3.9 | 3.9 | 10 | 35 | 36 | 1.70 | 15 |
| 0603-4.7 | 4.7 | 10 | 35 | 33 | 2.10 | 15 |
| 0603-5.6 | 5.6 | 4 | 35 | 22 | 1.55 | 5 |
| 0603-6.8 | 6.8 | 4 | 35 | 20 | 1.70 | 5 |
| 0603-8.2 | 8.2 | 4 | 30 | 18 | 2.10 | 5 |
| 0603-10 | 10 | 2 | 30 | 17 | 2.55 | 5 |
| 0603-12 | 12 | 1 | 30 | 15 | 2.75 | 5 |
| 0603-15 | 15 | 1 | 20 | 14 | 1.70 | 5 |
| 0603-18 | 18 | 1 | 20 | 13 | 1.85 | 5 |

Inductance-Current Characteristics



Q-Frequency Characteristics



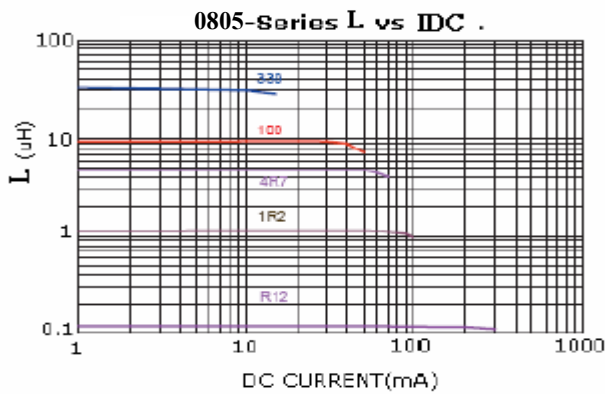
MULTILAYER CHIP INDUCTORS

ELECTRICAL CHARACTERISTICS FOR 0805

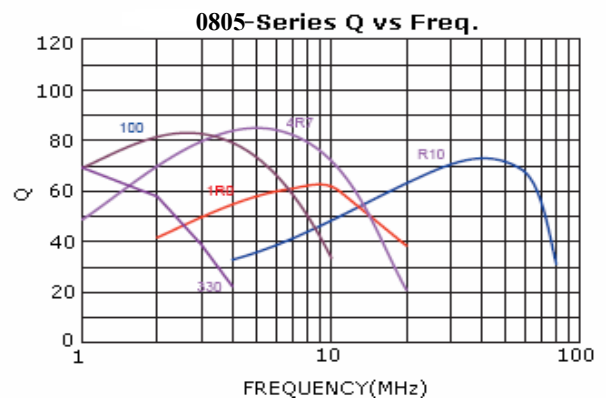
| Part No. | Inductance (uH) | Test Freq. (MHz) | Q Min | Self Resonant FREQ. (MHz) Min | DC Resistance (Ω) Max | Rated Current (mA) Max |
|------------|-----------------|------------------|-------|-------------------------------|-----------------------|------------------------|
| 0805-0.047 | 0.047 | 50 | 20 | 320 | 0.20 | 300 |
| 0805-0.068 | 0.068 | 50 | 20 | 280 | 0.20 | 300 |
| 0805-0.082 | 0.082 | 50 | 20 | 255 | 0.20 | 300 |
| 0805-0.10 | 0.10 | 25 | 25 | 235 | 0.30 | 250 |
| 0805-0.12 | 0.12 | 25 | 25 | 220 | 0.30 | 250 |
| 0805-0.15 | 0.15 | 25 | 25 | 200 | 0.40 | 250 |
| 0805-0.18 | 0.18 | 25 | 25 | 185 | 0.40 | 250 |
| 0805-0.22 | 0.22 | 25 | 25 | 170 | 0.50 | 250 |
| 0805-0.27 | 0.27 | 25 | 25 | 150 | 0.50 | 250 |
| 0805-0.33 | 0.33 | 25 | 25 | 145 | 0.55 | 250 |
| 0805-0.39 | 0.39 | 25 | 25 | 135 | 0.65 | 250 |
| 0805-0.47 | 0.47 | 25 | 25 | 125 | 0.65 | 250 |
| 0805-0.56 | 0.56 | 25 | 25 | 115 | 0.75 | 150 |
| 0805-0.68 | 0.68 | 25 | 25 | 105 | 0.80 | 150 |
| 0805-0.82 | 0.82 | 25 | 25 | 100 | 1.00 | 150 |
| 0805-1.0 | 1.0 | 10 | 45 | 75 | 0.45 | 50 |
| 0805-1.2 | 1.2 | 10 | 45 | 65 | 0.50 | 50 |
| 0805-1.5 | 1.5 | 10 | 45 | 60 | 0.50 | 50 |
| 0805-1.8 | 1.8 | 10 | 45 | 55 | 0.60 | 50 |
| 0805-2.2 | 2.2 | 10 | 45 | 50 | 0.65 | 30 |
| 0805-2.7 | 2.7 | 10 | 45 | 45 | 0.75 | 30 |
| 0805-3.3 | 3.3 | 10 | 45 | 41 | 0.80 | 30 |
| 0805-3.9 | 3.9 | 10 | 45 | 38 | 0.90 | 30 |
| 0805-4.7 | 4.7 | 10 | 45 | 35 | 1.00 | 30 |
| 0805-5.6 | 5.6 | 4 | 45 | 32 | 0.90 | 15 |
| 0805-6.8 | 6.8 | 4 | 45 | 29 | 1.00 | 15 |
| 0805-8.2 | 8.2 | 4 | 45 | 26 | 1.10 | 15 |
| 0805-10 | 10 | 2 | 45 | 24 | 1.15 | 15 |
| 0805-12 | 12 | 2 | 45 | 22 | 1.25 | 15 |
| 0805-15 | 15 | 1 | 30 | 19 | 0.80 | 5 |
| 0805-18 | 18 | 1 | 30 | 18 | 0.90 | 5 |
| 0805-22 | 22 | 1 | 30 | 16 | 1.10 | 5 |
| 0805-27 | 27 | 1 | 30 | 14 | 1.15 | 5 |
| 0805-33 | 33 | 0.4 | 30 | 13 | 1.25 | 5 |

★ 0805 type: when L>2.2, the Dimension C becomes 1.25±0.2

Inductance-Current Characteristics



Q-Frequency Characteristics

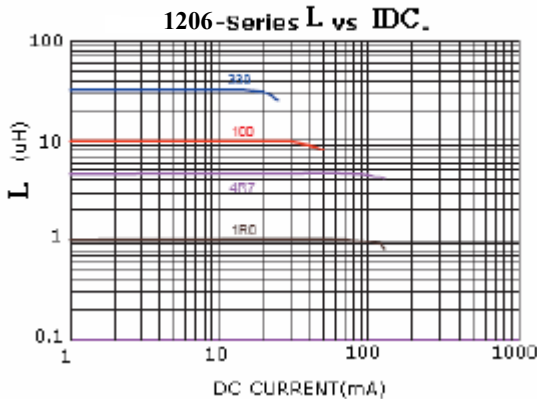


MULTILAYER CHIP INDUCTORS

ELECTRICAL CHARACTERISTICS FOR 1206

| Part No. | Inductance (uH) | Test Freq. (MHz) | Q Min | Self Resonant FREQ. (MHz) Min | DC Resistance (Ω) Max | Rated Current (mA) Max |
|------------|-----------------|------------------|-------|-------------------------------|-----------------------|------------------------|
| 1206-0.047 | 0.047 | 50 | 20 | 320 | 0.15 | 300 |
| 1206-0.068 | 0.068 | 50 | 20 | 280 | 0.25 | 300 |
| 1206-0.082 | 0.082 | 50 | 20 | 250 | 0.25 | 300 |
| 1206-0.10 | 0.10 | 25 | 25 | 235 | 0.25 | 250 |
| 1206-0.12 | 0.12 | 25 | 25 | 220 | 0.30 | 250 |
| 1206-0.15 | 0.15 | 25 | 25 | 200 | 0.30 | 250 |
| 1206-0.18 | 0.18 | 25 | 25 | 185 | 0.40 | 250 |
| 1206-0.22 | 0.22 | 25 | 25 | 170 | 0.40 | 250 |
| 1206-0.27 | 0.27 | 25 | 25 | 150 | 0.50 | 250 |
| 1206-0.33 | 0.33 | 25 | 25 | 145 | 0.60 | 250 |
| 1206-0.39 | 0.39 | 25 | 25 | 135 | 0.60 | 200 |
| 1206-0.47 | 0.47 | 25 | 25 | 125 | 0.60 | 200 |
| 1206-0.56 | 0.56 | 25 | 25 | 115 | 0.70 | 150 |
| 1206-0.68 | 0.68 | 25 | 25 | 105 | 0.80 | 150 |
| 1206-0.82 | 0.82 | 25 | 25 | 100 | 0.90 | 150 |
| 1206-1.0 | 1.0 | 10 | 45 | 75 | 0.40 | 100 |
| 1206-1.2 | 1.2 | 10 | 45 | 65 | 0.50 | 100 |
| 1206-1.5 | 1.5 | 10 | 45 | 60 | 0.50 | 80 |
| 1206-1.8 | 1.8 | 10 | 45 | 55 | 0.50 | 70 |
| 1206-2.2 | 2.2 | 10 | 45 | 50 | 0.60 | 60 |
| 1206-2.7 | 2.7 | 10 | 45 | 45 | 0.60 | 60 |
| 1206-3.3 | 3.3 | 10 | 45 | 41 | 0.70 | 60 |
| 1206-3.9 | 3.9 | 10 | 45 | 38 | 0.80 | 50 |
| 1206-4.7 | 4.7 | 10 | 45 | 35 | 0.90 | 50 |
| 1206-5.6 | 5.6 | 4 | 45 | 32 | 0.70 | 25 |
| 1206-6.8 | 6.8 | 4 | 45 | 29 | 0.80 | 25 |
| 1206-8.2 | 8.2 | 4 | 45 | 26 | 0.90 | 25 |
| 1206-10 | 10 | 2 | 45 | 24 | 1.00 | 25 |
| 1206-12 | 12 | 2 | 45 | 22 | 1.05 | 15 |
| 1206-15 | 15 | 1 | 35 | 19 | 0.70 | 5 |
| 1206-18 | 18 | 1 | 35 | 18 | 0.75 | 5 |
| 1206-22 | 22 | 1 | 35 | 16 | 0.90 | 5 |
| 1206-27 | 27 | 1 | 35 | 14 | 0.90 | 5 |
| 1206-33 | 33 | 0.4 | 35 | 13 | 1.05 | 5 |

Inductance-Current Characteristics



Q-Frequency Characteristics

