

MF0603 SERIES – Multilayer Ceramic Chip Inductors

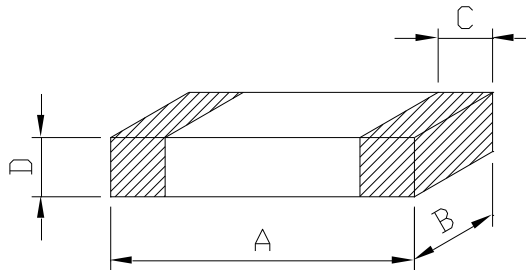


PART NUMBERING SYSTEM

| | | | |
|-----------|-------------|-------------|-----------|
| MF | 0603 | 1N5S | LF |
| TYPE | DIMENSIONS | INDUCTANCE | LEAD FREE |

SHAPES AND DIMENSIONS

UNIT : mm



$A=0.6\pm0.03$ $B=0.3\pm0.03$ $C=0.15\pm0.05$ $D=0.3\pm0.03$

FEATURES

1. Provides high Q characteristics .
2. Supports operating frequency bands of up to 10GHZ .
3. Excellent solder ability and high heat resistance for either flow or reflow soldering .
4. Size : 0201 type , Compact low profile Multilayer Ceramic Chip Inductors – only 0.33 mm thickness Max.
5. RoHS-compliant.

APPLICATION

1. Mobile phones .
2. Portable phones .
3. Cordless phones .
4. Pagers and personal handy-phone systems (PHS) .

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SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (nH) 100MHz | INDUCTANCE TOLERANCE | Q (Min.) 100MHz | SRF (GHz) Min. | Rated Current(mA) (Max.) | DCR(Ω) (Max.) |
|----------------|---------------------------|-------------------------|-------------------------|-------------------|--------------------------------|---------------------------|
| MF0603-1N0S-LF | 1.0 | S | 4 | 10 | 470 | 0.11 |
| MF0603-1N2S-LF | 1.2 | S | 4 | 10 | 450 | 0.12 |
| MF0603-1N5S-LF | 1.5 | S | 4 | 10 | 430 | 0.13 |
| MF0603-1N8S-LF | 1.8 | S | 4 | 10 | 390 | 0.16 |
| MF0603-2N0S-LF | 2.0 | S | 4 | 10 | 380 | 0.18 |
| MF0603-2N2S-LF | 2.2 | S | 4 | 8.8 | 360 | 0.19 |
| MF0603-2N7S-LF | 2.7 | S | 5 | 7.7 | 340 | 0.21 |
| MF0603-3N3□-LF | 3.3 | S, K | 5 | 6.7 | 320 | 0.30 |
| MF0603-3N9□-LF | 3.9 | S, K | 5 | 6.0 | 300 | 0.30 |
| MF0603-4N7□-LF | 4.7 | S, K | 5 | 5.3 | 280 | 0.40 |
| MF0603-5N6□-LF | 5.6 | S, K | 5 | 4.6 | 260 | 0.36 |
| MF0603-6N8□-LF | 6.8 | J, K | 5 | 3.9 | 250 | 0.39 |
| MF0603-8N2□-LF | 8.2 | J, K | 5 | 3.4 | 230 | 0.45 |
| MF0603-10N□-LF | 10.0 | J, K | 5 | 2.9 | 220 | 0.51 |
| MF0603-12N□-LF | 12.0 | J, K | 5 | 2.7 | 190 | 0.68 |
| MF0603-15N□-LF | 15.0 | J, K | 5 | 2.3 | 180 | 0.71 |
| MF0603-18N□-LF | 18.0 | J, K | 5 | 2.1 | 170 | 0.81 |
| MF0603-22N□-LF | 22.0 | J, K | 5 | 1.8 | 150 | 1.00 |
| MF0603-27N□-LF | 27.0 | J, K | 4 | 1.8 | 120 | 1.35 |
| MF0603-33N□-LF | 33.0 | J, K | 4 | 1.7 | 110 | 1.47 |
| MF0603-39N□-LF | 39.0 | J, K | 4 | 1.5 | 100 | 1.72 |
| MF0603-47N□-LF | 47.0 | J, K | 4 | 1.3 | 100 | 1.90 |
| MF0603-56N□-LF | 56.0 | J, K | 4 | 1.3 | 80 | 2.27 |
| MF0603-68N□-LF | 68.0 | J, K | 4 | 1.1 | 80 | 2.66 |
| MF0603-82N□-LF | 82.0 | J, K | 4 | 1.0 | 70 | 3.37 |
| MF0603-R10□-LF | 100.0 | J, K | 4 | 0.9 | 60 | 3.74 |

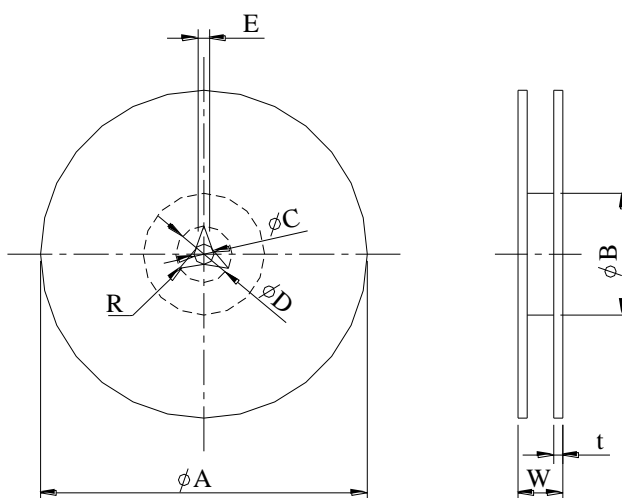
- Test equipment : HP-4287A RF LCR Meter or equipment ; L & Q test Frequency at 100MHz
- □ : INDUCTANCE TOLERANCE (J : $\pm 5\%$, K : $\pm 10\%$, S : $\pm 0.3nH$); Operating temp. range from $-40^{\circ}C$ to $+105^{\circ}C$.



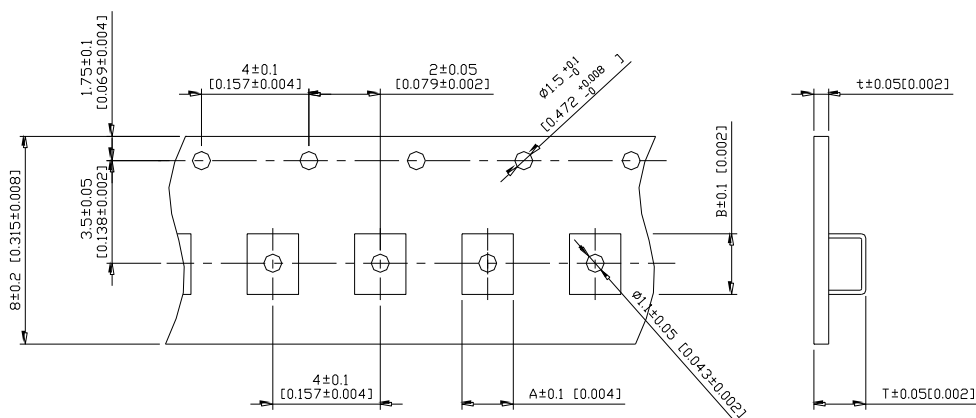
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PACKAGING SPECIFICATION



| | A | B | C | D | E | W8 | W12 | t | R |
|-------------------|--------|-------|---------|---------|---|--------|----------|----------|---|
| T(ψ178mm) Reel | ψ178±2 | ψ60±1 | ψ13±0.8 | ψ21±0.8 | 2 | 10±1.5 | 14.5±1.5 | 1.27±0.2 | 1 |



| TYPE | A | B | T | t | T(ψ178mm) | T(ψ330mm) |
|--------|----------|----------|----------|-----|-----------------|-----------|
| MF0603 | 0.4±0.05 | 0.7±0.05 | 0.45Max. | 0.2 | 15,000 pcs/reel | — |