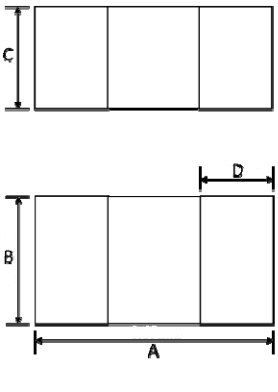
# Product Specification

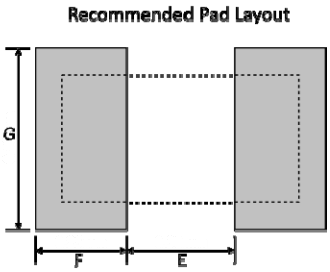
This product is certified to comply with the RoHS Directive 2002/95/EC.

MAGNA Frequency Components

## FC0603 Thin Film Ceramic Chip Inductor

- Industry standard
- High SRF
- Good Q
- Wide inductance range
- Tight tolerance




| Size | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 0603 | 1.70 | 0.90 | 0.55 | 0.50 | 0.90 | 0.60 | 1.10 |

Measurements in mm

| Specification | |
|---|---|
| **Inductance range** | 1.0 ~ 100nH |
| **SRF** | to 13GHz |
| **Q** | 15 |
| **Temp. range** | -55 to +125ºC |
| **DCR** | from 0.35Ω |
| **Current** | to 800mA |
| **Storage temp.** | -55 to +125ºC |

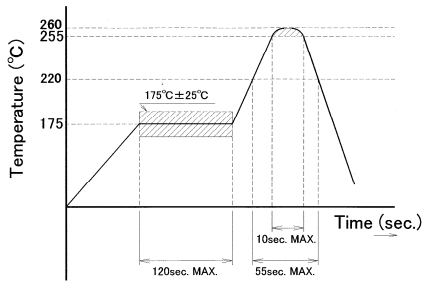
'*' suffix denotes RoHS Compliant

Standard packing: 5k per 7" reel (T/R)
Smaller quantities: Bulk

Sample kits and designer kits are available

| Ordering Code Guide | | | |
|---|---|---|---|
| **Series Code** | **Tolerance** | **Value** | **RoHS** |
| FC0603 | J = ±5% | 1N0 = 1nH | * |
| | G = ±2% | 10N = 10nH | |
| | H = ±1% | R10 = 100nH | |
| | S = ±0.3nH | 1R0 = 1uH | |
| | V = ±0.2nH | | |
| | T = ±0.1nH | | |

**Reflow Profile**






Magna Frequency Components, Magna House, Dales Manor Business Park, Sawston, Cambridge, CB22 3TJ
Tel: +44 1223 834800 Fax: +44 1223 834600 Email: sales@magnafrequency.com

# Product Specification

This product is certified to comply with the RoHS Directive 2002/95/EC.

MAGNA Frequency Components

## FC0603 Thin Film Ceramic Chip Inductor

| Value Code | Inductance (nH) | Tolerance | Test Freq. (MHz) | Q Min. | Test Freq. (MHz) | SRF Min. (GHz) | RDC Max. (Ω) | IDC Max. (mA) |
|---|---|---|---|---|---|---|---|---|
| 1N0 | 1.0 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 13.0 | 0.35 | 800 |
| 1N2 | 1.2 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 13.0 | 0.35 | 800 |
| 1N5 | 1.5 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 10.0 | 0.35 | 800 |
| 1N8 | 1.8 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 10.0 | 0.35 | 300 |
| 2N2 | 2.2 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 8.0 | 0.35 | 300 |
| 2N7 | 2.7 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 6.0 | 0.45 | 300 |
| 3N3 | 3.3 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 6.0 | 0.45 | 300 |
| 3N9 | 3.9 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 6.0 | 0.45 | 300 |
| 4N7 | 4.7 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 5.0 | 0.55 | 300 |
| 5N6 | 5.6 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 5.0 | 0.65 | 300 |
| 6N8 | 6.8 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 5.0 | 0.75 | 300 |
| 8N2 | 8.2 | ±0.1nH, ±0.2nH, ±0.3nH | 300 | 15 | 300 | 4.0 | 0.95 | 300 |
| 10N | 10 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 4.0 | 0.95 | 300 |
| 12N | 12 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 3.0 | 1.05 | 300 |
| 15N | 15 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 3.0 | 1.35 | 300 |
| 18N | 18 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 2.0 | 1.65 | 300 |
| 22N | 22 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 2.0 | 1.95 | 250 |
| 27N | 27 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 2.0 | 2.35 | 250 |
| 33N | 33 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 1.5 | 2.75 | 250 |
| 39N | 39 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 1.5 | 3.00 | 200 |
| 47N | 47 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 1.5 | 3.00 | 200 |
| 56N | 56 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 1.0 | 5.00 | 150 |
| 68N | 68 | ±1%, ±2%, ±5% | 300 | 15 | 300 | 1.0 | 5.00 | 150 |
| R10 | 100 | ±2%, ±5% | 300 | 15 | 300 | 1.0 | 7.50 | 100 |


Magna Frequency Components, Magna House, Dales Manor Business Park, Sawston, Cambridge, CB22 3TJ
Tel: +44 1223 834800 Fax: +44 1223 834600 Email: sales@magnafrequency.com