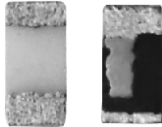


## Thin Film Chip Inductors



| STANDARD ELECTRICAL SPECIFICATIONS |           |            |            |             |                      |                    |                                |
|------------------------------------|-----------|------------|------------|-------------|----------------------|--------------------|--------------------------------|
| L<br>500<br>MHz<br>(nH)            | L<br>TOL. | Q TYPICAL  |            |             | SRF<br>TYP.<br>(MHz) | DCR<br>MAX.<br>(Ω) | RATED<br>DC<br>CURRENT<br>(mA) |
|                                    |           | 100<br>MHz | 800<br>MHz | 1700<br>MHz |                      |                    |                                |
| 1.0                                | 0.3 nH    | 7          | 21         | 33          | 12 000               | 0.15               | 700                            |
| 1.2                                | 0.3 nH    | 7          | 21         | 33          | 12 000               | 0.15               | 700                            |
| 1.5                                | 0.3 nH    | 7          | 21         | 33          | 10 000               | 0.25               | 700                            |
| 1.8                                | 0.3 nH    | 7          | 21         | 33          | 10 000               | 0.25               | 560                            |
| 2.2                                | 0.3 nH    | 7          | 21         | 33          | 8000                 | 0.35               | 440                            |
| 2.7                                | 0.3 nH    | 7          | 21         | 33          | 8000                 | 0.35               | 440                            |
| 3.3                                | 0.3 nH    | 7          | 21         | 28          | 6000                 | 0.45               | 380                            |
| 3.9                                | 0.3 nH    | 7          | 21         | 28          | 6000                 | 0.55               | 340                            |
| 4.7                                | 0.3 nH    | 7          | 21         | 28          | 6000                 | 0.65               | 320                            |
| 5.6                                | 0.3 nH    | 7          | 21         | 28          | 6000                 | 0.85               | 280                            |
| 6.8                                | 0.3 nH    | 7          | 21         | 28          | 6000                 | 1.05               | 260                            |
| 8.2                                | 0.3 nH    | 7          | 21         | 28          | 5500                 | 1.25               | 220                            |
| 10                                 | 2 %, 5 %  | 7          | 21         | 26          | 4500                 | 1.35               | 200                            |
| 12                                 | 2 %, 5 %  | 5          | 21         | 26          | 3700                 | 1.55               | 180                            |
| 15                                 | 2 %, 5 %  | 5          | 21         | 26          | 3300                 | 1.75               | 130                            |
| 18                                 | 2 %, 5 %  | 5          | 21         | 21          | 3100                 | 2.15               | 100                            |
| 22                                 | 2 %, 5 %  | 5          | 21         | 19          | 2800                 | 2.65               | 90                             |

**Note**

- Test equipment: HP-4287 and Agilent 16196B

**FEATURES**

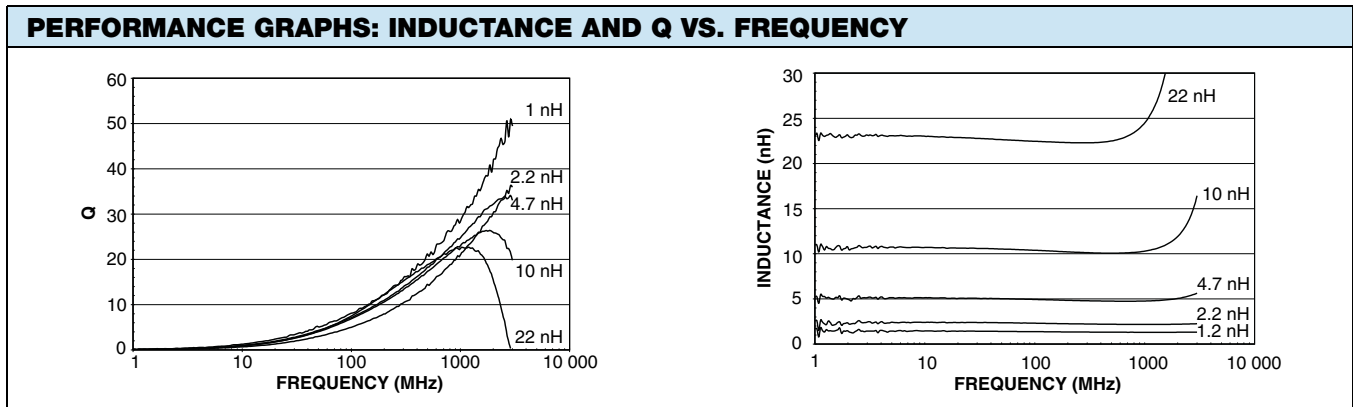
- Tight tolerance
- Self-resonant frequency controlled within 10 %
- Stable inductance over high frequencies
- Compatible with reflow or flow soldering
- Temperature range: - 40 °C to + 125 °C (no load)  
- 40 °C to + 85 °C (full rated current)
- Compliant to RoHS directive 2002/95/EC



**APPLICATIONS**

- Cellular telephone, pagers and GPS products
- Wireless LAN and other communication appliances
- VCO, TCXO circuit and RF transceiver module

| DIMENSIONS in inches [millimeters] |                              |                              |                              |                              |
|------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|                                    |                              |                              |                              |                              |
| MODEL                              | A                            | B                            | C                            | D                            |
| IFCB-0402                          | 0.039±0.002<br>[1.00 ± 0.05] | 0.020±0.002<br>[0.50 ± 0.05] | 0.013±0.002<br>[0.32 ± 0.05] | 0.008±0.004<br>[0.20 ± 0.10] |



| DESCRIPTION |                  |                      |              |                               |
|-------------|------------------|----------------------|--------------|-------------------------------|
| IFCB-0402   | 10 nH            | ± 5 %                | ER           | e3                            |
| MODEL       | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER |   |   |   |  |
|--------------------|---|---|---|--|
| I                  | F | C | B |  |
| PRODUCT FAMILY     |   |   |   |  |
| 0                  | 4 | 0 | 2 |  |
| SIZE               |   |   |   |  |
| E                  | R |   |   |  |
| PACKAGE CODE       |   |   |   |  |
| 1                  | 0 | N |   |  |
| INDUCTANCE VALUE   |   |   |   |  |
| J                  |   |   |   |  |
| TOL.               |   |   |   |  |



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