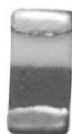




Surface-Mount, Multi Layer High Frequency Ceramic Inductors



MECHANICAL SPECIFICATIONS

Solderability: 95 % coverage after 3 s ± 1 s dip in 240 °C ± 5 °C solder following 60 s preheat at 100 °C to 150 °C and type R flux dip

Resistance to Solder Heat: 10 s ± 1 s in 260 °C ± 5 °C solder, after preheat and flux above

Terminal Strength: 10 kg for 10 s

Flex: 3 mm min. mounted on 0.8 mm thick PC board

FEATURES

- High reliability
- Surface mountable
- Tape and reel packaging per EIA specifications: 10 000 pieces on 7" reel
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT HALOGEN FREE

ENVIRONMENTAL SPECIFICATIONS

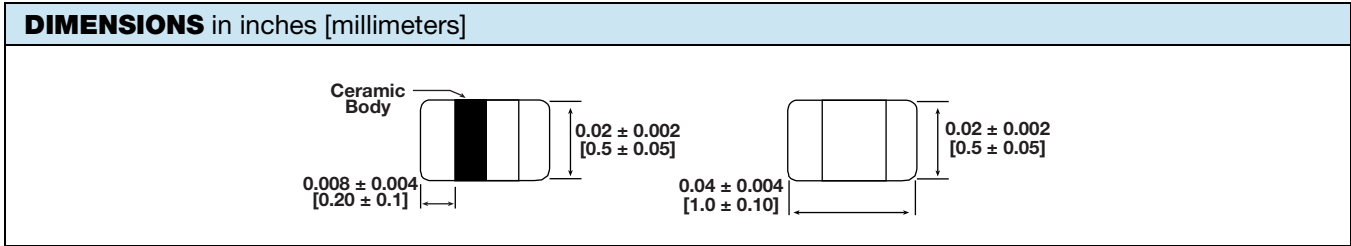
Operating Temperature: -55 °C to +125 °C

Thermal Shock: 1000 cycles, -55 °C to +125 °C

Humidity: +85 °C, 85 % RH, 1000 h at full rated current

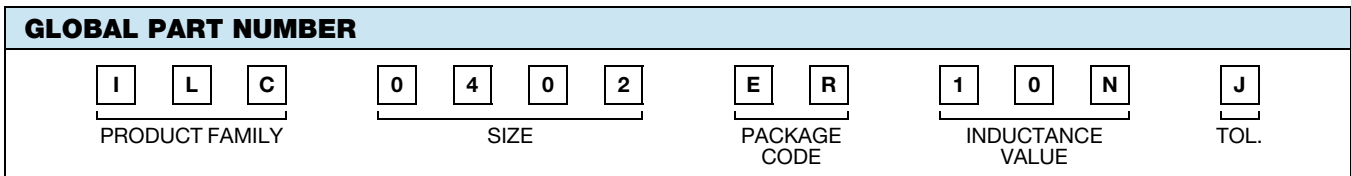
Load Life: +125 °C for 1000 h at full rated current

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | |
|------------------------------------|-----------|--------|----------------------|--------|----------------|--------------|----------------------------|
| PART NUMBER | IND. (nH) | TOL. | TEST FREQUENCY (MHz) | Q MIN. | SRF (MHz) MIN. | DCR MAX. (Ω) | RATED DC CURRENT MAX. (mA) |
| ILC0402ER1N0S | 1.0 | 0.3 nH | 100 | 8 | 8000 | 0.10 | 300 |
| ILC0402ER1N2S | 1.2 | 0.3 nH | 100 | 8 | 8000 | 0.10 | 300 |
| ILC0402ER1N5S | 1.5 | 0.3 nH | 100 | 8 | 8000 | 0.10 | 300 |
| ILC0402ER1N8S | 1.8 | 0.3 nH | 100 | 8 | 6000 | 0.10 | 300 |
| ILC0402ER2N2S | 2.2 | 0.3 nH | 100 | 8 | 6000 | 0.15 | 300 |
| ILC0402ER2N7S | 2.7 | 0.3 nH | 100 | 8 | 6000 | 0.17 | 300 |
| ILC0402ER3N3S | 3.3 | 0.3 nH | 100 | 8 | 6000 | 0.19 | 300 |
| ILC0402ER3N9S | 3.9 | 0.3 nH | 100 | 8 | 6000 | 0.19 | 300 |
| ILC0402ER4N7S | 4.7 | 0.3 nH | 100 | 8 | 6000 | 0.23 | 300 |
| ILC0402ER5N6S | 5.6 | 0.3 nH | 100 | 8 | 5300 | 0.26 | 300 |
| ILC0402ER6N8J | 6.8 | 5 % | 100 | 8 | 4200 | 0.29 | 300 |
| ILC0402ER8N2J | 8.2 | 5 % | 100 | 8 | 3600 | 0.33 | 300 |
| ILC0402ER10NJ | 10 | 5 % | 100 | 8 | 3200 | 0.35 | 300 |
| ILC0402ER12NJ | 12 | 5 % | 100 | 8 | 2800 | 0.41 | 300 |
| ILC0402ER15NJ | 15 | 5 % | 100 | 8 | 2300 | 0.46 | 300 |
| ILC0402ER18NJ | 18 | 5 % | 100 | 8 | 2100 | 0.51 | 300 |
| ILC0402ER22NJ | 22 | 5 % | 100 | 8 | 1400 | 0.58 | 300 |
| ILC0402ER27NJ | 27 | 5 % | 100 | 8 | 1600 | 0.67 | 300 |
| ILC0402ER33NJ | 33 | 5 % | 100 | 8 | 1500 | 0.67 | 200 |
| ILC0402ER39NJ | 39 | 5 % | 100 | 8 | 1200 | 1.06 | 200 |
| ILC0402ER47NJ | 47 | 5 % | 100 | 8 | 1000 | 1.15 | 200 |
| ILC0402ER56NJ | 56 | 5 % | 100 | 8 | 800 | 1.20 | 200 |
| ILC0402ER68NJ | 68 | 5 % | 100 | 8 | 800 | 1.25 | 180 |
| ILC0402ER82NJ | 82 | 5 % | 100 | 8 | 600 | 1.40 | 150 |
| ILC0402ERR10J | 100 | 5 % | 100 | 8 | 600 | 1.60 | 150 |
| ILC0402ERR12J | 120 | 5 % | 100 | 8 | 600 | 1.60 | 150 |
| ILC0402ERR15J | 150 | 5 % | 100 | 8 | 500 | 2.99 | 140 |
| ILC0402ERR18J | 180 | 5 % | 100 | 8 | 500 | 3.38 | 150 |
| ILC0402ERR22J | 220 | 5 % | 100 | 8 | 500 | 3.77 | 120 |
| ILC0402ERR27J | 270 | 5 % | 100 | 8 | 400 | 4.90 | 110 |



DESCRIPTION

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





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