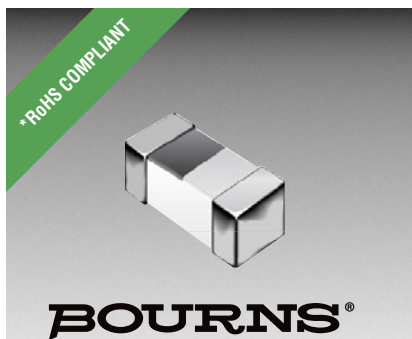




## Features

- 0402 size
- Available in E12 Series
- High frequency
- Nickel barrier
- RoHS compliant\*

## Applications

- Mobile phones
- Cellular phones
- CTV, VCR, HIC, FDD

# CI100505 Series - Multilayer Chip Inductors

## Electrical Specifications

| Bourns<br>Part No. | Inductance<br>@100 MHz |         | Q Typ.      |             |              | SRF<br>MHz |       | DCR         | I rms      |
|--------------------|------------------------|---------|-------------|-------------|--------------|------------|-------|-------------|------------|
|                    | nH                     | Tol. %  | @100<br>MHz | @500<br>MHz | @1000<br>MHz | Min.       | Typ.  | ohm<br>Max. | mA<br>Max. |
| CI100505-1N0D      | 1.0                    | ±0.3 nH | 8           | 34          | 52           | 6000       | 13000 | 0.08        | 300        |
| CI100505-1N2D      | 1.2                    | ±0.3 nH | 8           | 35          | 52           | 6000       | 10000 | 0.09        | 300        |
| CI100505-1N5D      | 1.5                    | ±0.3 nH | 8           | 33          | 48           | 6000       | 10000 | 0.10        | 300        |
| CI100505-1N8D      | 1.8                    | ±0.3 nH | 8           | 30          | 42           | 6000       | 9500  | 0.12        | 300        |
| CI100505-2N2D      | 2.2                    | ±0.3 nH | 8           | 25          | 36           | 6000       | 9000  | 0.13        | 300        |
| CI100505-2N7D      | 2.7                    | ±0.3 nH | 8           | 24          | 34           | 6000       | 9000  | 0.13        | 300        |
| CI100505-3N3D      | 3.3                    | ±0.3 nH | 8           | 24          | 35           | 6000       | 8000  | 0.16        | 300        |
| CI100505-3N9D      | 3.9                    | ±0.3 nH | 8           | 24          | 35           | 4000       | 6500  | 0.21        | 300        |
| CI100505-4N7D      | 4.7                    | ±0.3 nH | 8           | 23          | 34           | 4000       | 5000  | 0.21        | 300        |
| CI100505-5N6D      | 5.6                    | ±0.3 nH | 8           | 24          | 35           | 4000       | 5000  | 0.23        | 300        |
| CI100505-6N8J      | 6.8                    | ±5      | 8           | 23          | 32           | 3900       | 4400  | 0.25        | 300        |
| CI100505-8N2J      | 8.2                    | ±5      | 8           | 23          | 31           | 3600       | 4000  | 0.28        | 250        |
| CI100505-10NJ      | 10                     | ±5      | 8           | 23          | 31           | 3200       | 3500  | 0.31        | 250        |
| CI100505-12NJ      | 12                     | ±5      | 8           | 23          | 31           | 2700       | 3500  | 0.40        | 200        |
| CI100505-15NJ      | 15                     | ±5      | 8           | 23          | 30           | 2300       | 3000  | 0.46        | 200        |
| CI100505-18NJ      | 18                     | ±5      | 8           | 23          | 30           | 2100       | 2600  | 0.55        | 200        |
| CI100505-22NJ      | 22                     | ±5      | 8           | 22          | 27           | 1900       | 2200  | 0.60        | 200        |
| CI100505-27NJ      | 27                     | ±5      | 8           | 21          | 26           | 1600       | 1900  | 0.70        | 200        |
| CI100505-33NJ      | 33                     | ±5      | 8           | 20          | 22           | 1300       | 1700  | 0.80        | 200        |
| CI100505-39NJ      | 39                     | ±5      | 8           | 20          | 21           | 1200       | 1600  | 0.90        | 100        |
| CI100505-47NJ      | 47                     | ±5      | 8           | 19          | 18           | 1000       | 1300  | 1.00        | 100        |
| CI100505-56NJ      | 56                     | ±5      | 8           | 18          | 16           | 750        | 900   | 1.00        | 100        |
| CI100505-68NJ      | 68                     | ±5      | 8           | 17          | 11           | 700        | 800   | 1.20        | 100        |
| CI100505-82NJ      | 82                     | ±5      | 8           | 16          | 6            | 600        | 700   | 1.30        | 100        |
| CI100505-R10J      | 100                    | ±5      | 8           | 14          | —            | 550        | 650   | 1.50        | 100        |

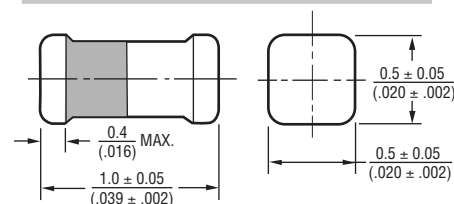
## General Specifications

Temperature Rise ..... 20 °C max. at rated current  
 Operating Temperature ..... -55 °C to +125 °C  
 Storage Temperature ..... -55 °C to +125 °C  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Resistance to Soldering Heat ..... 260 °C, 10 sec.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

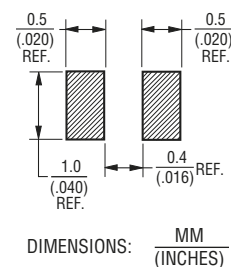
## Materials

Base Material.....Ceramic  
 Terminal .....Ag/Ni/Sn  
 Packaging..... 10,000 pcs. per reel

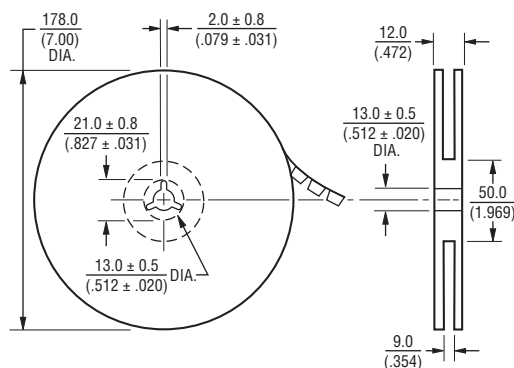
## Product Dimensions



## Recommended Layout



## Packaging Specifications



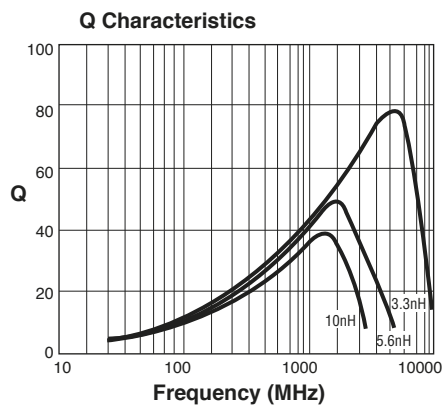
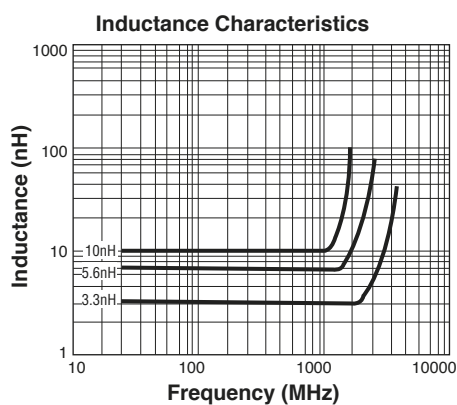
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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## CI100505 Series - Multilayer Chip Inductors

**BOURNS®**

### Electrical Specifications



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