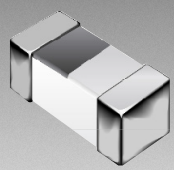


\*RoHS COMPLIANT



**BOURNS®**

**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 Part No. | Inductance @100 MHz |         | Q Typ.   |          |           | SRF MHz |       | DCR      | I rms   |
|-----------------|---------------------|---------|----------|----------|-----------|---------|-------|----------|---------|
|                 | nH                  | Tol. %  | @100 MHz | @500 MHz | @1000 MHz | Min.    | Typ.  | ohm Max. | mA 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     |

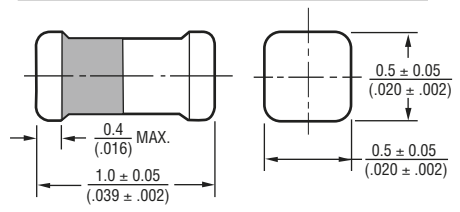
**General Specifications**

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

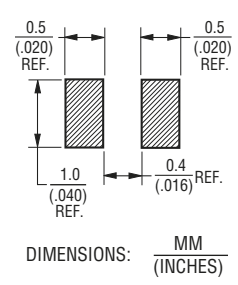
**Materials**

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

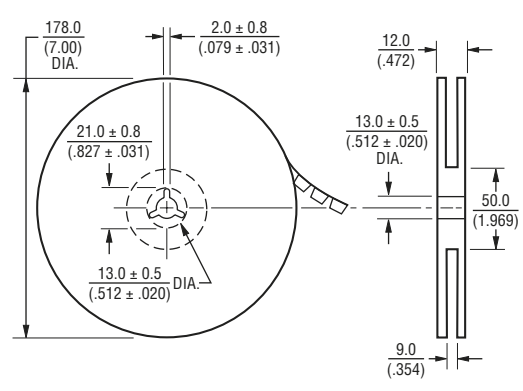
**Product Dimensions**



**Recommended Layout**



**Packaging Specifications**



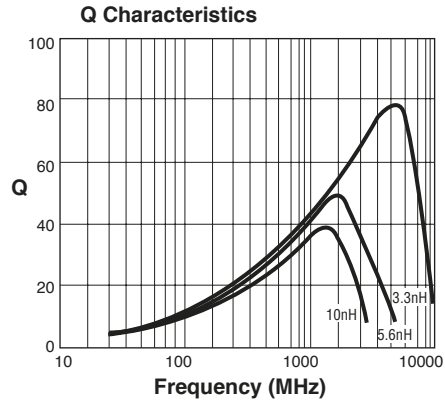
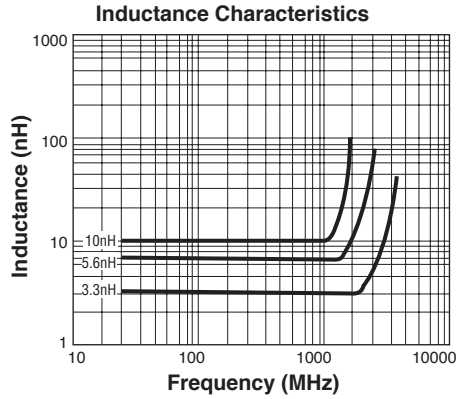
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

# CI100505 Series - Multilayer Chip Inductors

**BOURNS®**

## Electrical Specifications



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REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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