

**BOURNS®**

## Features

- 0805 size
- Available in E12 Series
- High frequency
- Nickel barrier
- Lead free

## Applications

- Mobil phones
- Cellular phones
- CTV, VCR, HIC, FDD
- Automotive electronics



# CI201210 Series - Multi-Layer Chip Inductors

## Electrical Specifications

| Bourns Part No. | Inductance |         | Q  | Test Freq. | SRF MHz |       | DCR  | I rms |
|-----------------|------------|---------|----|------------|---------|-------|------|-------|
|                 | nH         | Tol. %  |    |            | min.    | typ.  |      |       |
| CI201210-1N0D   | 1.0        | ±0.3 nH | 10 | 100        | 4000    | 12000 | 0.10 | 300   |
| CI201210-1N2D   | 1.2        | ±0.3 nH | 10 | 100        | 4000    | 10000 | 0.10 | 300   |
| CI201210-1N5D   | 1.5        | ±0.3 nH | 10 | 100        | 4000    | 10000 | 0.10 | 300   |
| CI201210-1N8D   | 1.8        | ±0.3 nH | 10 | 100        | 4000    | 8000  | 0.10 | 300   |
| CI201210-2N2D   | 2.2        | ±0.3 nH | 10 | 100        | 3800    | 8000  | 0.10 | 300   |
| CI201210-2N7D   | 2.7        | ±0.3 nH | 10 | 100        | 3600    | 6000  | 0.10 | 300   |
| CI201210-3N3D   | 3.3        | ±0.3 nH | 10 | 100        | 3400    | 6000  | 0.13 | 300   |
| CI201210-3N9D   | 3.9        | ±0.3 nH | 10 | 100        | 3200    | 5400  | 0.15 | 300   |
| CI201210-4N7D   | 4.7        | ±0.3 nH | 10 | 100        | 3000    | 4500  | 0.20 | 300   |
| CI201210-5N6D   | 5.6        | ±0.3 nH | 10 | 100        | 2800    | 4000  | 0.23 | 300   |
| CI201210-6N8J   | 6.8        | ±5      | 10 | 100        | 2600    | 3650  | 0.25 | 300   |
| CI201210-8N2J   | 8.2        | ±5      | 10 | 100        | 2200    | 3000  | 0.28 | 300   |
| CI201210-10NJ   | 10         | ±5      | 10 | 100        | 1800    | 2500  | 0.30 | 300   |
| CI201210-12NJ   | 12         | ±5      | 10 | 100        | 1650    | 2450  | 0.35 | 300   |
| CI201210-15NJ   | 15         | ±5      | 10 | 100        | 1350    | 2000  | 0.40 | 300   |
| CI201210-18NJ   | 18         | ±5      | 10 | 100        | 1350    | 1750  | 0.45 | 300   |
| CI201210-22NJ   | 22         | ±5      | 15 | 100        | 1100    | 1700  | 0.50 | 300   |
| CI201210-27NJ   | 27         | ±5      | 15 | 100        | 1100    | 1550  | 0.55 | 300   |
| CI201210-33NJ   | 33         | ±5      | 15 | 100        | 1000    | 1350  | 0.60 | 300   |
| CI201210-39NJ   | 39         | ±5      | 15 | 100        | 900     | 1300  | 0.65 | 300   |
| CI201210-47NJ   | 47         | ±5      | 15 | 100        | 850     | 1200  | 0.70 | 300   |
| CI201210-56NJ   | 56         | ±5      | 15 | 100        | 750     | 1150  | 0.75 | 300   |
| CI201210-68NJ   | 68         | ±5      | 15 | 100        | 400     | 1000  | 0.80 | 300   |
| CI201210-82NJ   | 82         | ±5      | 15 | 100        | 600     | 850   | 0.90 | 300   |
| CI201210-R10J   | 100        | ±5      | 15 | 100        | 500     | 730   | 1.00 | 300   |
| CI201210-R12J   | 120        | ±5      | 15 | 50         | 450     | 650   | 1.30 | 250   |
| CI201210-R15J   | 150        | ±5      | 15 | 50         | 400     | 550   | 1.50 | 250   |
| CI201210-R18J   | 180        | ±5      | 15 | 50         | 350     | 500   | 1.80 | 250   |
| CI201210-R22J   | 220        | ±5      | 10 | 50         | 330     | 450   | 2.00 | 250   |
| CI201210-R27J   | 270        | ±5      | 10 | 50         | 300     | 410   | 2.50 | 250   |
| CI201210-R33J   | 330        | ±5      | 10 | 50         | 270     | 370   | 3.00 | 250   |
| CI201210-R39J   | 390        | ±5      | 10 | 50         | 220     | 330   | 3.50 | 250   |
| CI201210-R47J   | 470        | ±5      | 10 | 50         | 180     | 280   | 4.00 | 250   |

## General Specifications

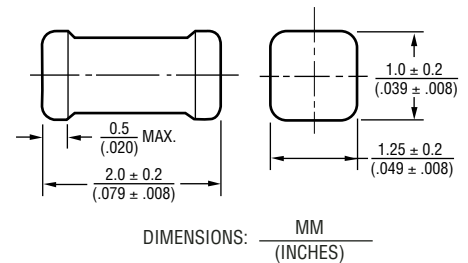
### Temperature Rise

.....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 seconds

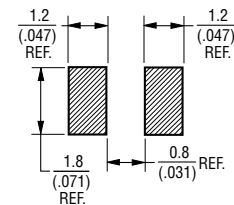
## Materials

Base Material .....Ceramic  
 Terminal Electrode.....Ag, Ni, Sn  
 Packaging.....3,000 pcs. per reel

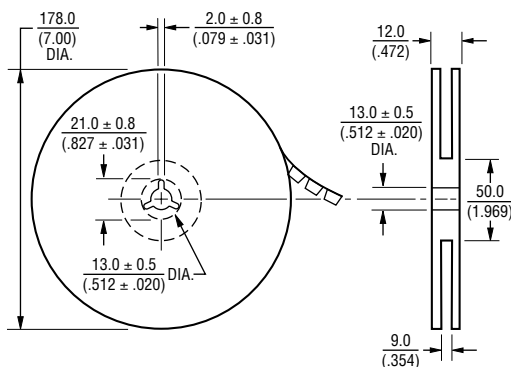
## Product Dimensions



## Recommended Layout



## Packaging Specifications



Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

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## Electrical Specifications

