

Features

- 0805 size
- Available in E12 series
- High Q up to 80 typ.
- High operating temperature of 125 °C
- Small size of only 2.0 mm
- RoHS compliant*

Applications

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

CW201212 Series - High Q Chip Inductors

Electrical Specifications

| Bourns® Part No. | Inductance | | Q | Test Freq. (MHz) | | SRF (MHz) | RDC (Ohms) | | I _{rms} (mA) |
|------------------|------------|--------|----|------------------|------|-----------|------------|------|-----------------------|
| | nH | Tol. % | | L | Q | | Min. | Max. | |
| CW201212-2N2J | 2.2 | ±5 | 50 | 250 | 1000 | 6000 | 0.06 | 600 | |
| CW201212-2N7J | 2.7 | ±5 | 35 | 250 | 1000 | 6000 | 0.08 | 600 | |
| CW201212-2N8J | 2.8 | ±5 | 32 | 250 | 1000 | 6000 | 0.06 | 800 | |
| CW201212-3N3J | 3.3 | ±5 | 30 | 250 | 1500 | 6000 | 0.08 | 600 | |
| CW201212-3N9J | 3.9 | ±5 | 60 | 250 | 1000 | 6000 | 0.06 | 600 | |
| CW201212-4N7J | 4.7 | ±5 | 60 | 250 | 1000 | 5800 | 0.06 | 600 | |
| CW201212-5N6J | 5.6 | ±5 | 60 | 250 | 1000 | 5800 | 0.08 | 600 | |
| CW201212-6N8J | 6.8 | ±5 | 60 | 250 | 1000 | 5800 | 0.06 | 600 | |
| CW201212-8N2J | 8.2 | ±5 | 60 | 250 | 1000 | 5500 | 0.06 | 600 | |
| CW201212-10NJ | 10 | ±5 | 60 | 250 | 500 | 4800 | 0.08 | 600 | |
| CW201212-12NJ | 12 | ±5 | 60 | 250 | 500 | 4100 | 0.08 | 600 | |
| CW201212-15NJ | 15 | ±5 | 60 | 250 | 500 | 3600 | 0.08 | 600 | |
| CW201212-18NJ | 18 | ±5 | 60 | 250 | 500 | 3400 | 0.08 | 600 | |
| CW201212-22NJ | 22 | ±5 | 60 | 250 | 500 | 3300 | 0.10 | 600 | |
| CW201212-27NJ | 27 | ±5 | 60 | 250 | 500 | 2600 | 0.12 | 600 | |
| CW201212-33NJ | 33 | ±5 | 60 | 250 | 500 | 2400 | 0.15 | 500 | |
| CW201212-39NJ | 39 | ±5 | 60 | 250 | 500 | 2100 | 0.18 | 500 | |
| CW201212-47NJ | 47 | ±5 | 60 | 200 | 500 | 1700 | 0.15 | 500 | |
| CW201212-56NJ | 56 | ±5 | 60 | 200 | 500 | 1600 | 0.25 | 500 | |
| CW201212-68NJ | 68 | ±5 | 60 | 200 | 500 | 1450 | 0.27 | 500 | |
| CW201212-82NJ | 82 | ±5 | 60 | 150 | 500 | 1350 | 0.32 | 500 | |
| CW201212-R10J | 100 | ±5 | 60 | 150 | 500 | 1200 | 0.43 | 400 | |
| CW201212-R12J | 120 | ±5 | 50 | 150 | 250 | 1100 | 0.48 | 400 | |
| CW201212-R15J | 150 | ±5 | 50 | 100 | 250 | 950 | 0.67 | 400 | |
| CW201212-R18J | 180 | ±5 | 50 | 100 | 250 | 900 | 0.85 | 350 | |
| CW201212-R22J | 220 | ±5 | 50 | 100 | 250 | 860 | 1.10 | 300 | |
| CW201212-R27J | 270 | ±5 | 45 | 100 | 250 | 850 | 1.46 | 250 | |
| CW201212-R33J | 330 | ±5 | 45 | 100 | 250 | 800 | 1.65 | 200 | |
| CW201212-R39J | 390 | ±5 | 45 | 100 | 250 | 780 | 2.20 | 170 | |
| CW201212-R47J | 470 | ±5 | 33 | 250 | 100 | 375 | 1.72 | 250 | |
| CW201212-R56J | 560 | ±5 | 23 | 50 | 50 | 340 | 1.90 | 230 | |
| CW201212-R68J | 680 | ±5 | 23 | 25 | 50 | 270 | 2.05 | 190 | |
| CW201212-R82J | 820 | ±5 | 23 | 25 | 50 | 230 | 2.30 | 180 | |
| CW201212-R91J | 910 | ±5 | 22 | 22 | 50 | 220 | 2.50 | 150 | |

Note: 2 % tolerance available for inductance ranges of 12 nH and above.
Replace "J" with "G".

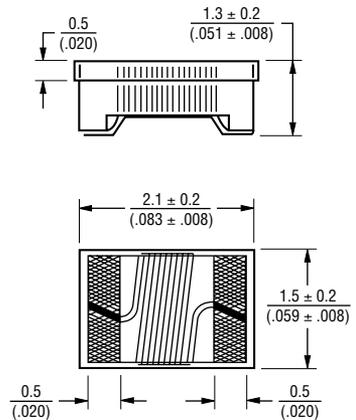
General Specifications

Temperature Rise40 °C max. at rated current
 Operating Temperature-40 °C to +125 °C
 Storage Temperature-40 °C to +125 °C
 Reflow Soldering .. 230 °C, 50 sec. max.
 Resistance to Soldering Heat +260 °C, 5 seconds

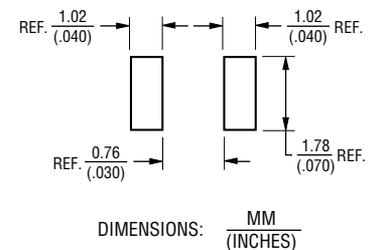
Materials

Core Material
 -2N2J through -R39J.....Ceramic
 -R47J through -R91J.....Ferrite
 Wire Enameled copper (1W1E180)
 Terminal Mo/Mn+Ni+Au
 Packaging..... 2,000 pcs. per reel

Product Dimensions



Recommended Layout



*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

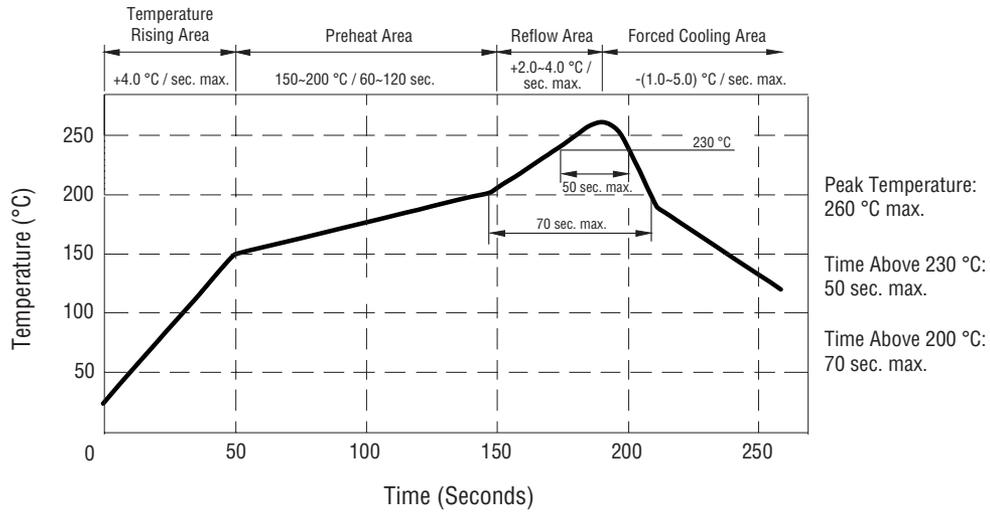
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

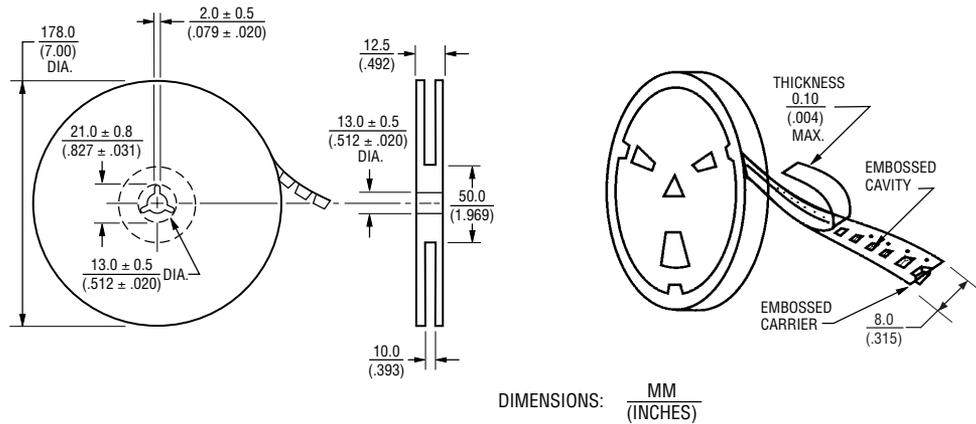
CW201212 Series - High Q Chip Inductors



Soldering Profile



Packaging Specifications



REV. 01/17

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Mouser Electronics

Authorized Distributor

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