

Features

- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Inductance range: 0.12 to 150 μ H
- RoHS compliant*

Applications

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

BOURNS®

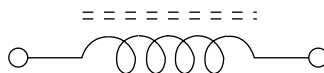
CM322522 Series - Chip Inductor

Electrical Specifications @25 °C

| Bourns Part No. | Inductance | | | Q Min. | Test Frequency (MHz) | SRF Min. (MHz) | DCR Max. (Ω) | IDC (mA) |
|-----------------|------------|-------------------|----------------|--------|----------------------|----------------|-----------------------|----------|
| | μ H | Standard Tol. (%) | Other Tol. (%) | | | | | |
| CM322522-R12ML | 0.12 | ± 20 | N/A | 30 | 25.2 | 500 | 0.22 | 450 |
| CM322522-R15ML | 0.15 | ± 20 | N/A | 30 | 25.2 | 450 | 0.25 | 450 |
| CM322522-R18ML | 0.18 | ± 20 | N/A | 30 | 25.2 | 400 | 0.28 | 450 |
| CM322522-R22*L | 0.22 | ± 20 | ± 10 | 30 | 25.2 | 350 | 0.32 | 450 |
| CM322522-R27*L | 0.27 | ± 20 | ± 10 | 30 | 25.2 | 320 | 0.36 | 450 |
| CM322522-R33*L | 0.33 | ± 20 | ± 10 | 30 | 25.2 | 300 | 0.4 | 450 |
| CM322522-R39*L | 0.39 | ± 20 | ± 10 | 30 | 25.2 | 250 | 0.45 | 450 |
| CM322522-R47*L | 0.47 | ± 20 | ± 10 | 30 | 25.2 | 220 | 0.5 | 450 |
| CM322522-R56*L | 0.56 | ± 20 | ± 10 | 30 | 25.2 | 180 | 0.55 | 450 |
| CM322522-R68*L | 0.68 | ± 20 | ± 10 | 30 | 25.2 | 160 | 0.6 | 450 |
| CM322522-R82*L | 0.82 | ± 20 | ± 10 | 30 | 25.2 | 140 | 0.65 | 450 |
| CM322522-1R0*L | 1 | ± 10 | ± 5 | 30 | 7.96 | 120 | 0.7 | 400 |
| CM322522-1R2*L | 1.2 | ± 10 | ± 5 | 30 | 7.96 | 100 | 0.75 | 390 |
| CM322522-1R5*L | 1.5 | ± 10 | ± 5 | 30 | 7.96 | 85 | 0.85 | 370 |
| CM322522-1R8*L | 1.8 | ± 10 | ± 5 | 30 | 7.96 | 80 | 0.9 | 350 |
| CM322522-2R2*L | 2.2 | ± 10 | ± 5 | 30 | 7.96 | 75 | 1 | 320 |
| CM322522-2R7*L | 2.7 | ± 10 | ± 5 | 30 | 7.96 | 70 | 1.1 | 290 |
| CM322522-3R3*L | 3.3 | ± 10 | ± 5 | 30 | 7.96 | 60 | 1.2 | 260 |
| CM322522-3R9*L | 3.9 | ± 10 | ± 5 | 30 | 7.96 | 55 | 1.3 | 250 |
| CM322522-4R7*L | 4.7 | ± 10 | ± 5 | 30 | 7.96 | 50 | 1.5 | 220 |
| CM322522-5R6*L | 5.6 | ± 10 | ± 5 | 30 | 7.96 | 45 | 1.6 | 200 |
| CM322522-6R8*L | 6.8 | ± 10 | ± 5 | 30 | 7.96 | 40 | 1.8 | 180 |
| CM322522-8R2*L | 8.2 | ± 10 | ± 5 | 30 | 7.96 | 35 | 2 | 170 |
| CM322522-100*L | 10 | ± 10 | ± 5 | 30 | 2.52 | 30 | 2.1 | 150 |
| CM322522-120*L | 12 | ± 10 | ± 5 | 30 | 2.52 | 20 | 2.5 | 140 |
| CM322522-150*L | 15 | ± 10 | ± 5 | 30 | 2.52 | 20 | 2.8 | 130 |
| CM322522-180*L | 18 | ± 10 | ± 5 | 30 | 2.52 | 20 | 3.3 | 120 |
| CM322522-220*L | 22 | ± 10 | ± 5 | 30 | 2.52 | 20 | 3.7 | 110 |
| CM322522-270*L | 27 | ± 10 | ± 5 | 30 | 2.52 | 20 | 5 | 80 |
| CM322522-330*L | 33 | ± 10 | ± 5 | 30 | 2.52 | 17 | 5.6 | 70 |
| CM322522-390*L | 39 | ± 10 | ± 5 | 30 | 2.52 | 16 | 6.4 | 65 |
| CM322522-470*L | 47 | ± 10 | ± 5 | 30 | 2.52 | 15 | 7 | 60 |
| CM322522-560*L | 56 | ± 10 | ± 5 | 30 | 2.52 | 13 | 8 | 55 |
| CM322522-680*L | 68 | ± 10 | ± 5 | 30 | 2.52 | 12 | 9 | 50 |
| CM322522-820*L | 82 | ± 10 | ± 5 | 30 | 2.52 | 11 | 10 | 45 |
| CM322522-101*L | 100 | ± 10 | ± 5 | 20 | 0.796 | 10 | 11 | 40 |
| CM322522-121*L | 120 | ± 10 | ± 5 | 20 | 0.796 | 10 | 11 | 70 |
| CM322522-151*L | 150 | ± 10 | ± 5 | 20 | 0.796 | 8 | 15 | 65 |

* Enter Standard or Other Tolerance Code:
M = ± 20 %, K = ± 10 %, J = ± 5 %

Schematic



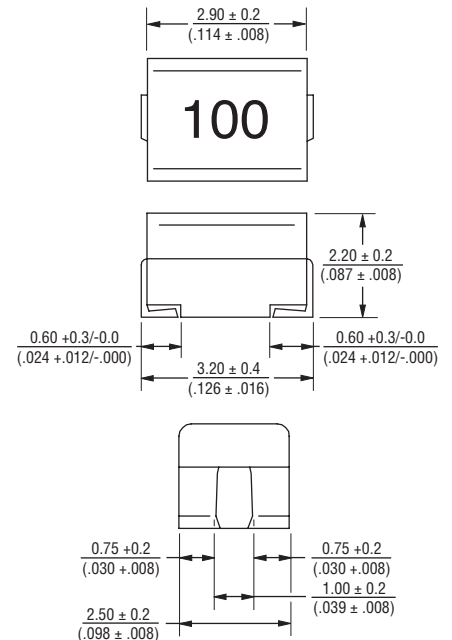
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Soldering Heat 245 °C, 5 seconds
Temperature Rise 20 °C
Rated Current.... Inductance drops 10 %
Moisture Sensitivity Level 3
ESD Classification (HBM)..... N/A

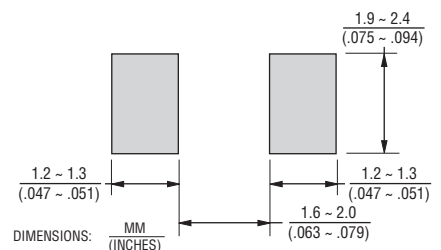
Materials

Core..... Ferrite
Wire Enamelled copper
Enclosure..... Epoxy resin
Terminal Finish Sn
Packaging..... 2,000 pcs. per 7-inch 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.

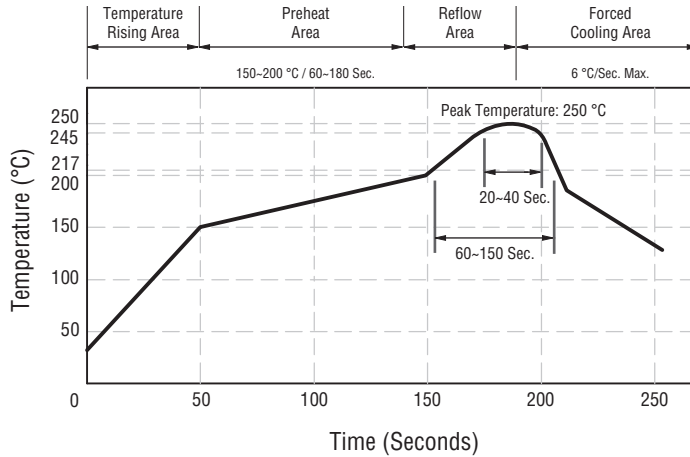
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

CM322522 Series - Chip Inductor



Soldering Profile



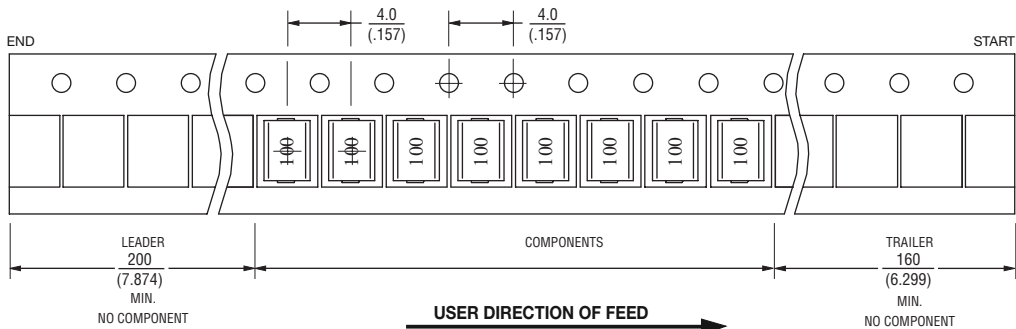
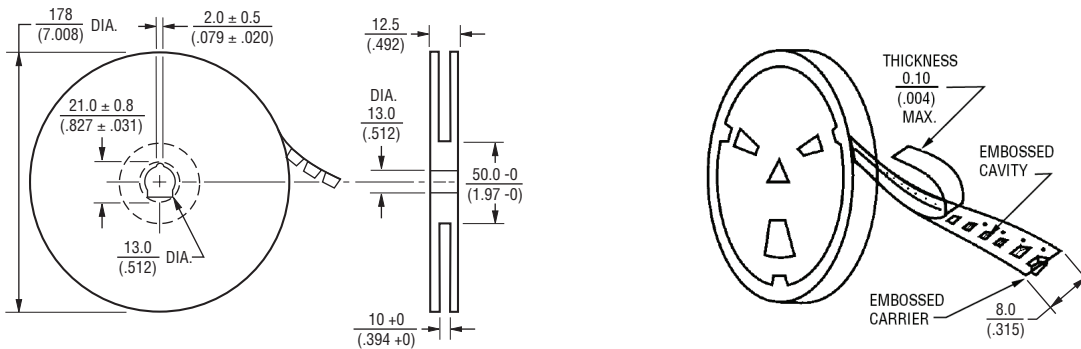
Peak Temperature:
250 °C max.

Max. Time Above 245 °C:
20-40 sec. max.

Max. Time Above 217 °C:
60-150 sec. max.

200 °C ~ 250 °C Average Ramp-up Rate:
3 °C / sec. max.

Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 08/17

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