



Features

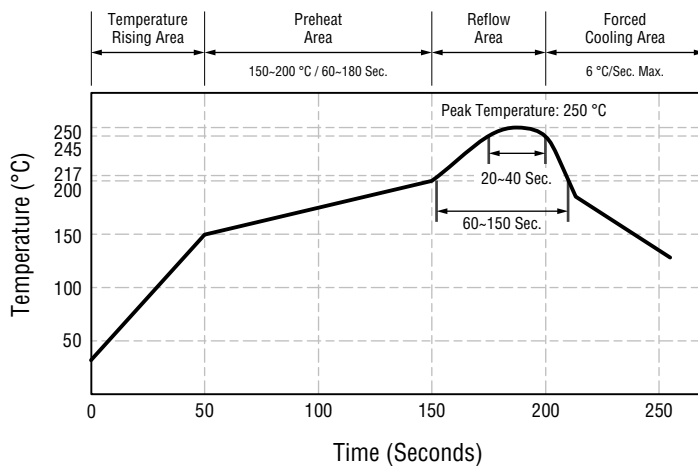
- High rated current
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Tight dimension tolerances for automatic placement
- AEC-Q200 compliant
- RoHS compliant*

CC453232A Series – Chip Inductors

Electrical Specifications @ 25 °C

| Bourns® Part No. | Inductance | | Q Min. | L & Q Test Frequency (MHz) | SRF (MHz) | DCR (Ω) | I _{rms} (A) | I _{sat} (A) |
|------------------|------------|-------|--------|----------------------------|-----------|---------|----------------------|----------------------|
| | L (μH) | Tol. | | | Min. | Max. | Typ. | Typ. |
| CC453232A-1R0KL | 1.00 | ±10 % | 10 | 7.960 | 180.0 | 0.100 | 2.30 | 2.25 |
| CC453232A-1R5KL | 1.50 | ±10 % | 10 | 7.960 | 110.0 | 0.120 | 1.90 | 1.85 |
| CC453232A-2R2KL | 2.20 | ±10 % | 10 | 7.960 | 70.0 | 0.170 | 1.60 | 1.55 |
| CC453232A-3R3KL | 3.30 | ±10 % | 10 | 7.960 | 35.0 | 0.210 | 1.50 | 1.25 |
| CC453232A-4R7KL | 4.70 | ±10 % | 10 | 7.960 | 30.0 | 0.260 | 1.30 | 1.05 |
| CC453232A-6R8KL | 6.80 | ±10 % | 10 | 7.960 | 25.0 | 0.320 | 1.20 | 0.90 |
| CC453232A-100KL | 10.00 | ±10 % | 20 | 2.520 | 20.0 | 0.480 | 1.00 | 0.70 |
| CC453232A-150KL | 15.00 | ±10 % | 20 | 2.520 | 14.0 | 0.610 | 0.75 | 0.60 |
| CC453232A-220KL | 22.00 | ±10 % | 20 | 2.520 | 12.0 | 0.900 | 0.62 | 0.50 |
| CC453232A-330KL | 33.00 | ±10 % | 20 | 2.520 | 10.0 | 1.150 | 0.55 | 0.40 |
| CC453232A-470KL | 47.00 | ±10 % | 20 | 2.520 | 8.0 | 1.650 | 0.45 | 0.30 |
| CC453232A-680KL | 68.00 | ±10 % | 20 | 2.520 | 7.0 | 2.500 | 0.35 | 0.26 |
| CC453232A-101KL | 100.00 | ±10 % | 30 | 0.796 | 5.5 | 4.000 | 0.28 | 0.22 |
| CC453232A-151KL | 150.00 | ±10 % | 30 | 0.796 | 4.5 | 6.000 | 0.22 | 0.19 |
| CC453232A-221KL | 220.00 | ±10 % | 30 | 0.796 | 3.7 | 7.700 | 0.20 | 0.17 |
| CC453232A-331KL | 330.00 | ±10 % | 30 | 0.796 | 3.1 | 11.000 | 0.17 | 0.14 |
| CC453232A-471KL | 470.00 | ±10 % | 30 | 0.796 | 2.7 | 16.000 | 0.14 | 0.12 |
| CC453232A-681KL | 680.00 | ±10 % | 30 | 0.796 | 2.2 | 24.000 | 0.12 | 0.10 |
| CC453232A-102KL | 1000.00 | ±10 % | 20 | 0.252 | 2.0 | 40.000 | 0.09 | 0.08 |

Soldering Profile



Reflow 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.

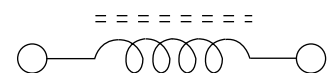
General Specifications

Operating Temperature -40 °C to +150 °C
 (Temperature rise included)
 Storage Temperature...-40 °C to +150 °C
 Rated Current:
 Inductance drops 10% at I_{sat}
 Temperature Rise 40 °C at I_{rms}
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

Materials

Core Ferrite
 Wire Enameled Copper
 Enclosure Epoxy resin
 Terminal Sn
 Packaging 500 pcs. per 7-inch reel

Schematic



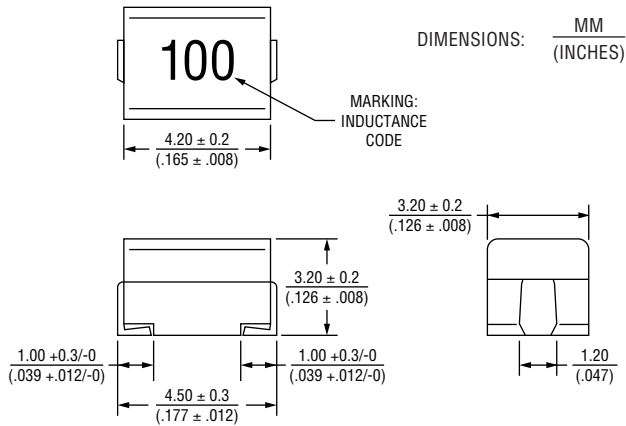
WARNING
 Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 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.

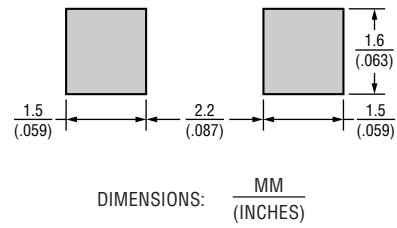
CC453232A Series - Chip Inductors



Product Dimensions

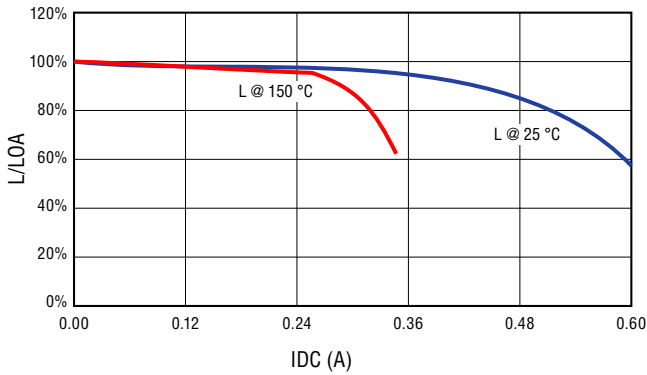


Recommended Layout

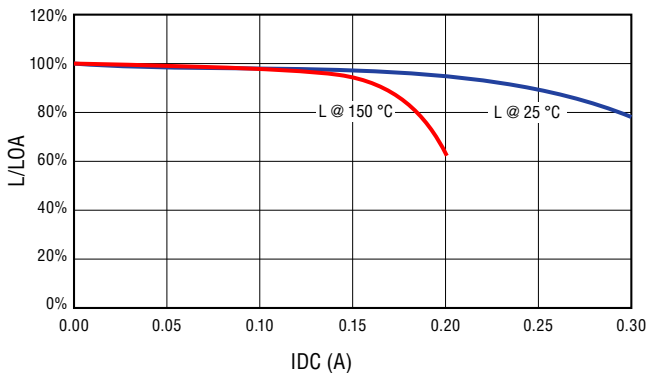


L vs. IDC

CC453232A-330KL

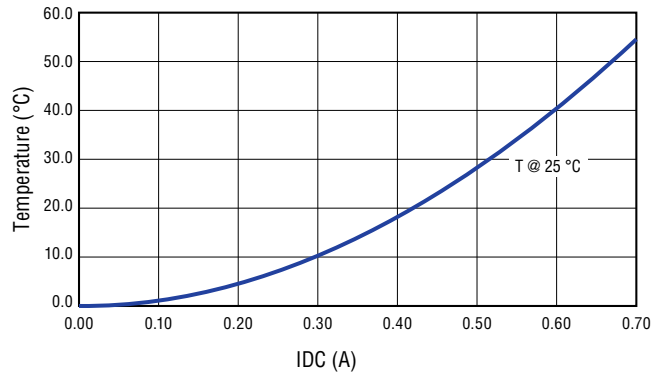


CC453232A-101KL

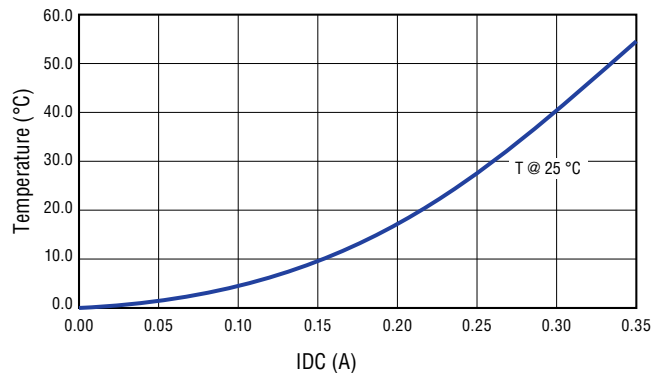


Temperature Rise vs. IDC

CC453232A-330KL



CC453232A-101KL



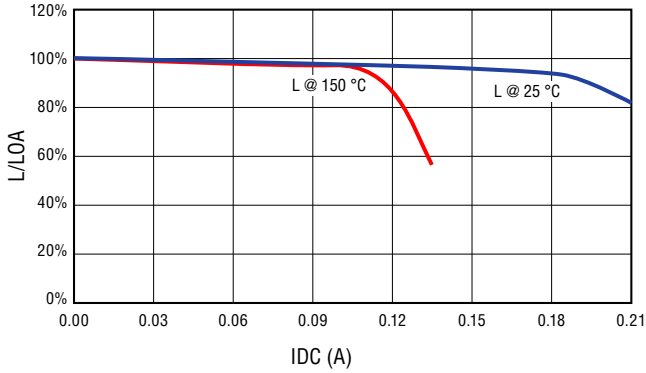
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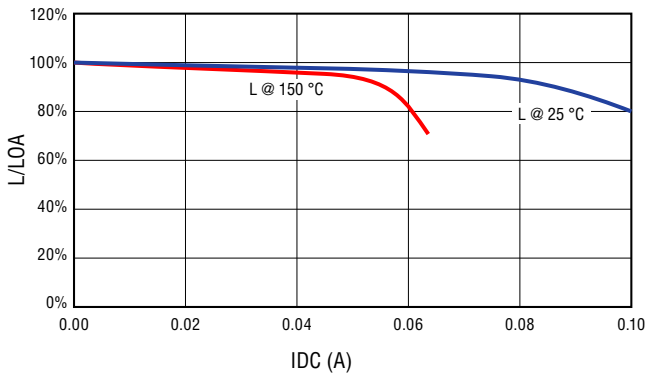
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L vs. IDC

CC453232A-221KL

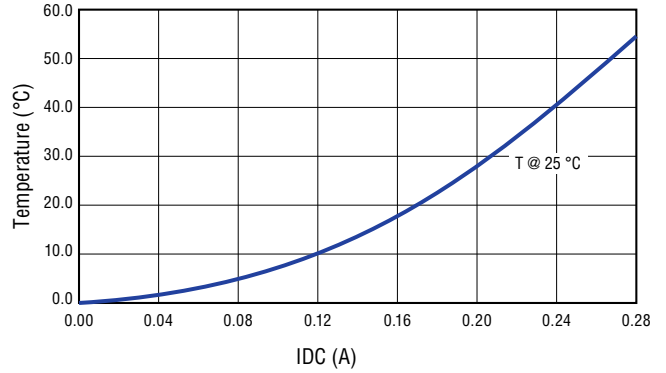


CC453232A-102KL

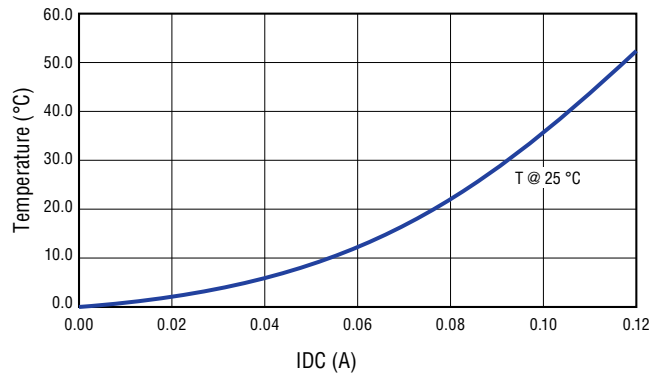


Temperature Rise vs. IDC

CC453232A-221KL



CC453232A-102KL



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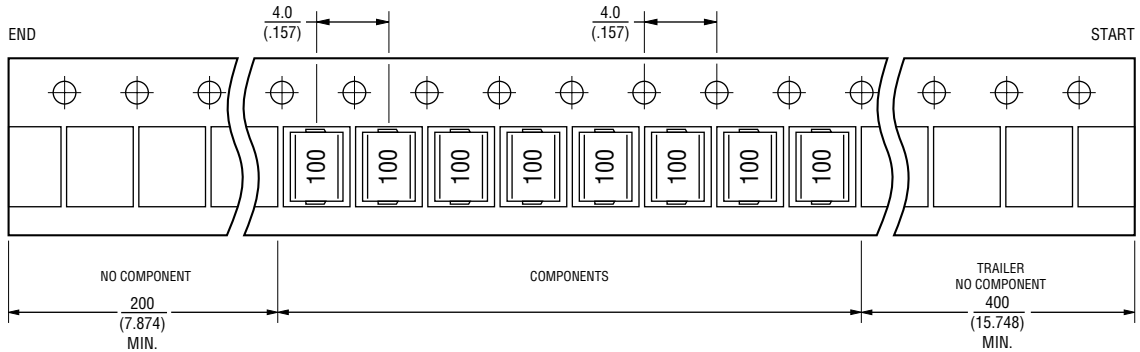
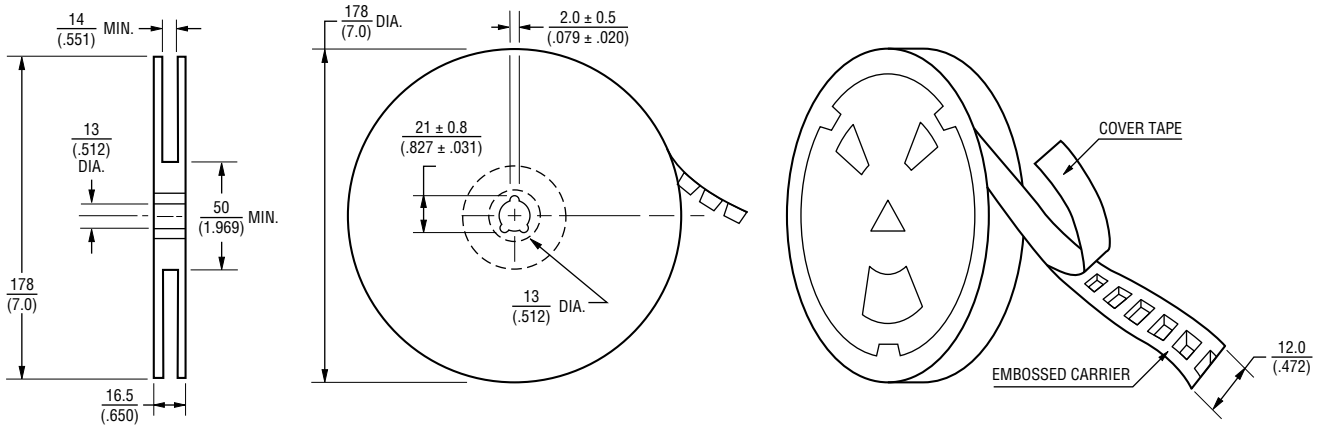
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CC453232A Series - Chip Inductors

BOURNS®

Packaging Specifications



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

USER DIRECTION OF FEED →
QTY: 500 PCS PER REEL

BOURNS®

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