



## Features

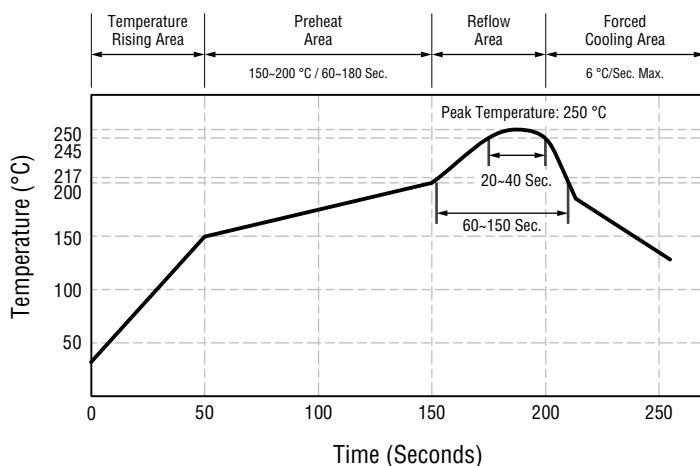
- High rated current
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Tight dimension tolerances for automatic placement
- AEC-Q200 compliant
- RoHS compliant\*

## CC453232A Series – Chip Inductors

### Electrical Specifications @ 25 °C

| Bourns® Part No. | Inductance |       | Q Min. | L & Q Test Frequency (MHz) | SRF (MHz) | DCR (Ω) | Irms (A) | Isat (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.

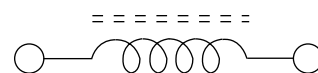
### General Specifications

Operating Temperature ..... -40 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature... -40 °C to +150 °C  
 Rated Current:  
 ..... Inductance drops 10% at Isat  
 Temperature Rise ..... 40 °C at Irms  
 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



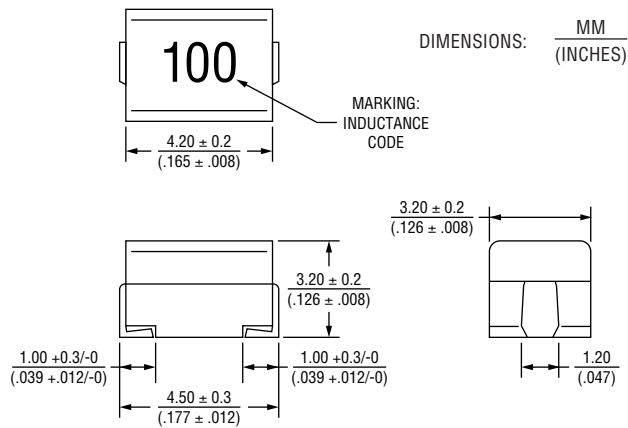
**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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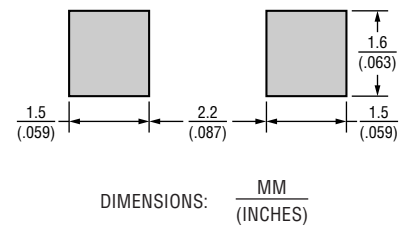
## CC453232A Series - Chip Inductors

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### Product Dimensions

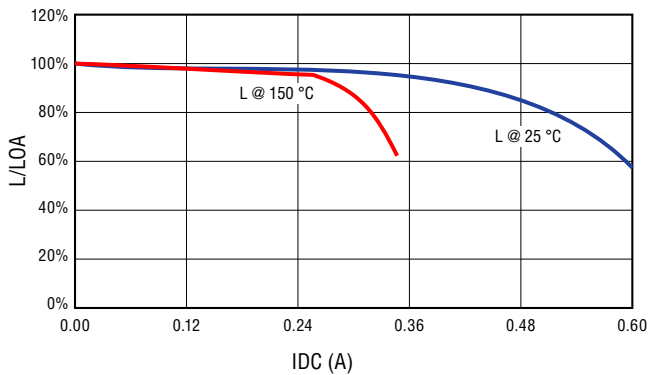


### Recommended Layout

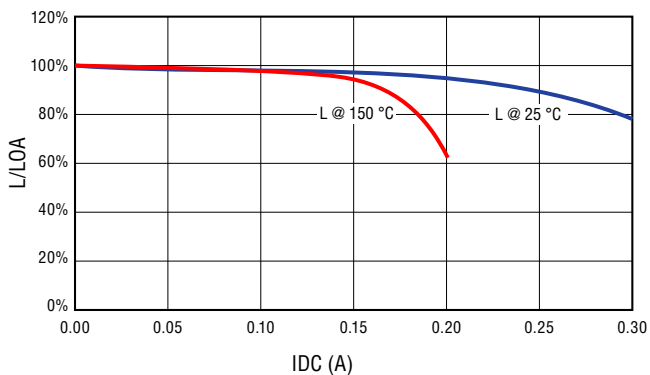


### L vs. IDC

CC453232A-330KL

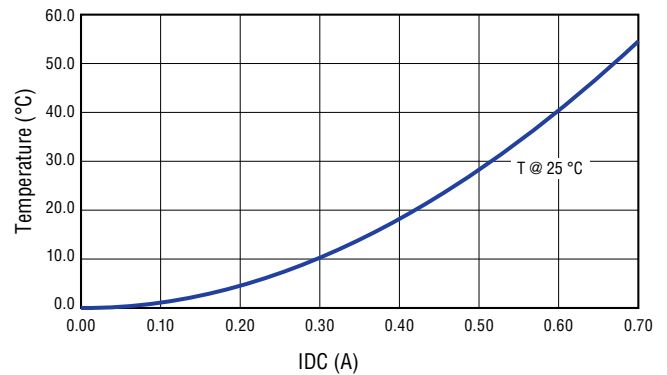


CC453232A-101KL

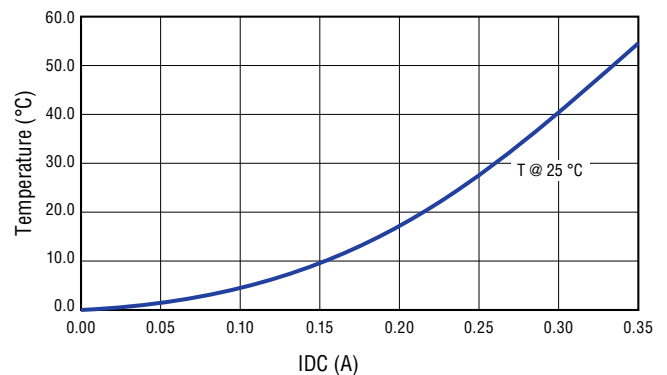


### Temperature Rise vs. IDC

CC453232A-330KL



CC453232A-101KL



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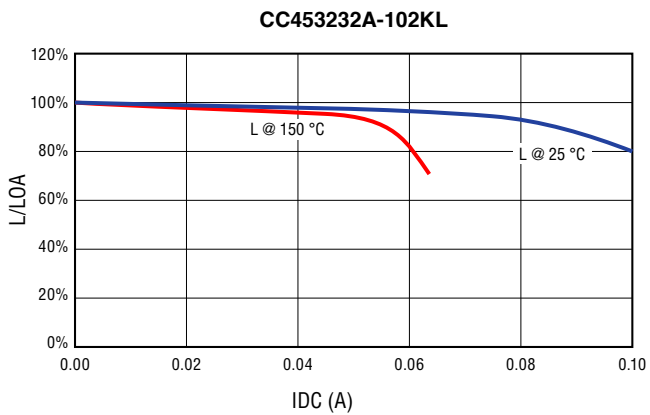
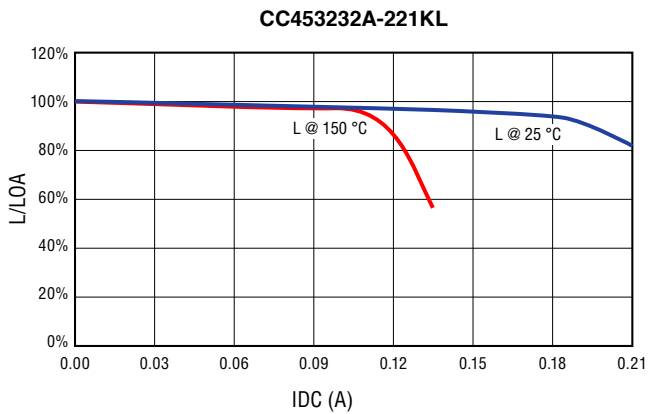
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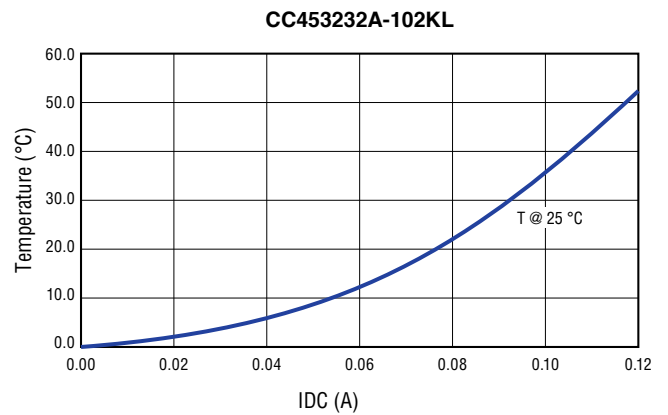
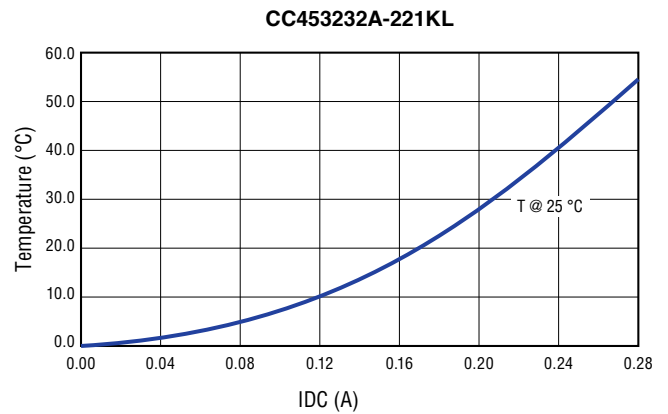
## CC453232A Series - Chip Inductors

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**L vs. IDC**



**Temperature Rise vs. IDC**



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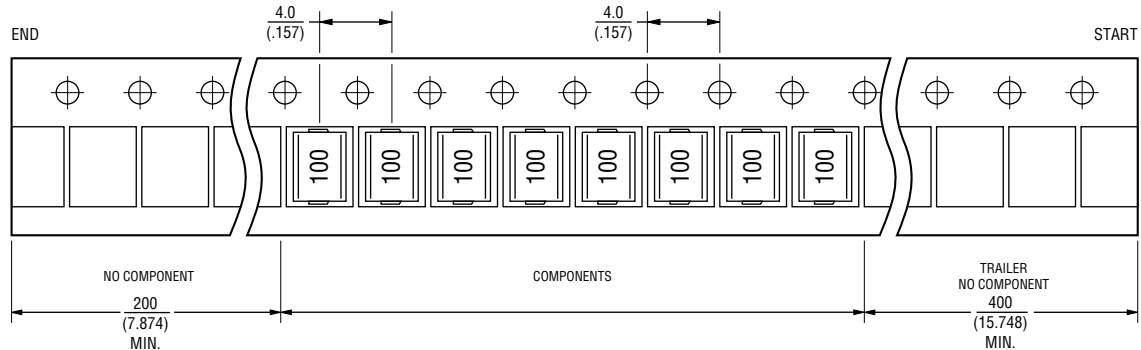
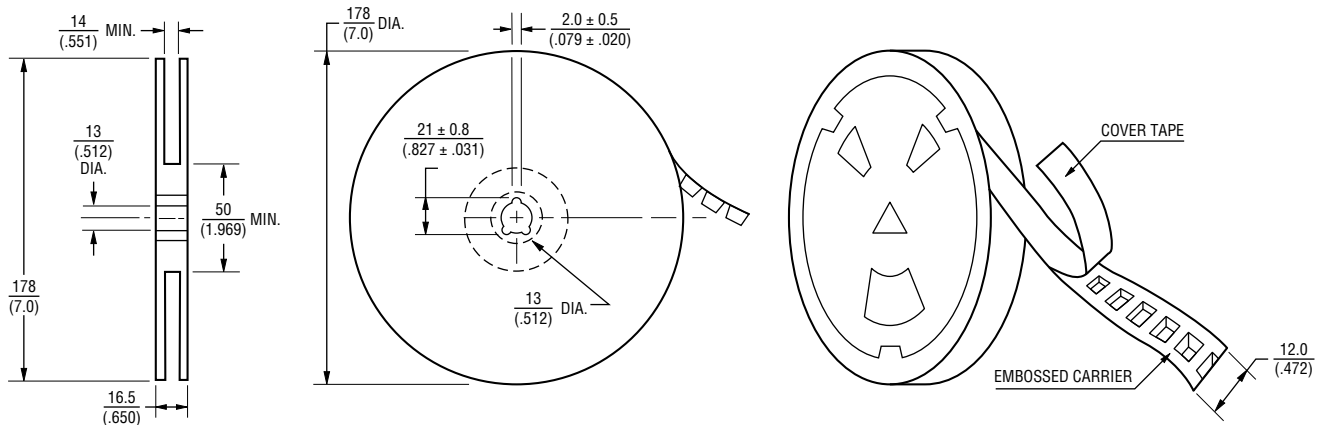
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## CC453232A Series - Chip Inductors

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### Packaging Specifications



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

USER DIRECTION OF FEED →  
QTY: 500 PCS PER REEL

**BOURNS®**

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