



## Features

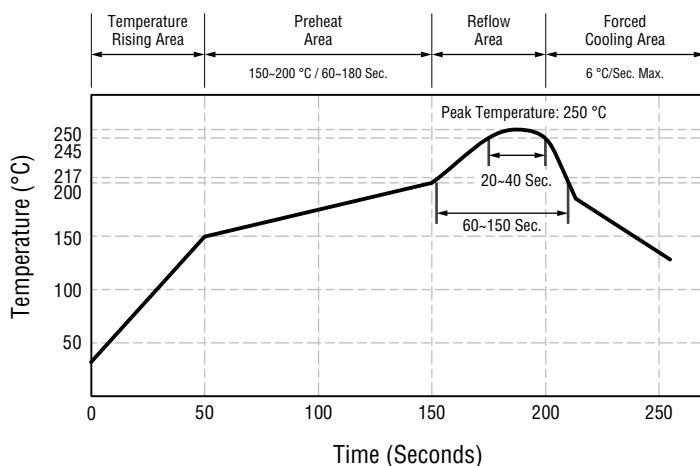
- High rated current
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Tight dimension tolerances for automatic placement
- AEC-Q200 compliant
- RoHS compliant\*

## CC453232A Series – Chip Inductors

### Electrical Specifications @ 25 °C

| Bourns® Part No. | Inductance |       | Q<br>Min. | L & Q Test<br>Frequency<br>(MHz) | SRF<br>(MHz) | DCR<br>(Ω) | Irms<br>(A) | Isat<br>(A) |
|------------------|------------|-------|-----------|----------------------------------|--------------|------------|-------------|-------------|
|                  | L (μH)     | Tol.  |           |                                  |              |            |             |             |
| 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.

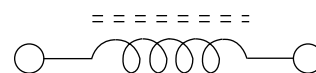
### General Specifications

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 ..... Enamelled Copper  
 Enclosure ..... Epoxy resin  
 Terminal ..... Sn  
 Packaging ..... 500 pcs. per 7-inch reel

### Schematic



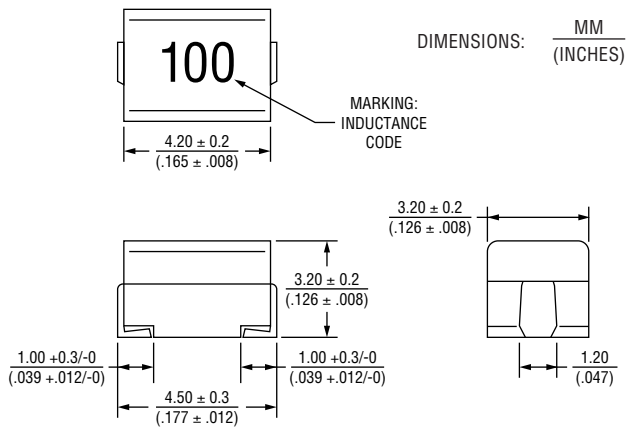
**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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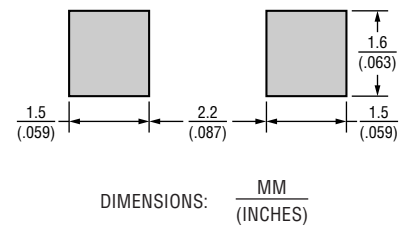
## CC453232A Series - Chip Inductors

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### Product Dimensions

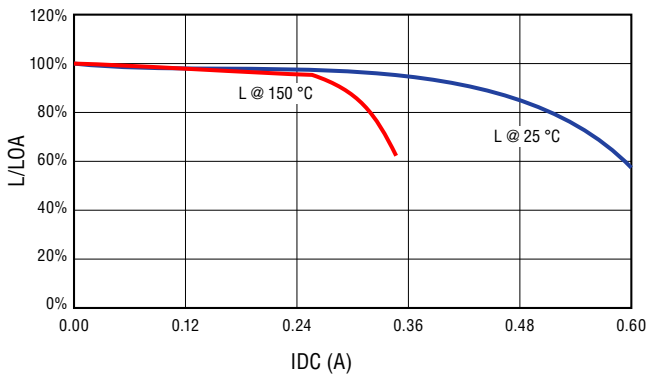


### Recommended Layout

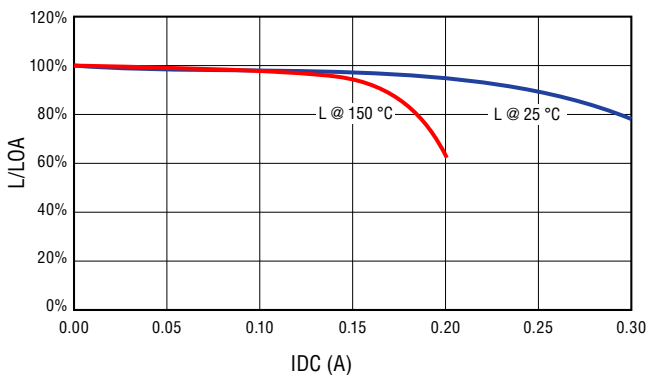


### L vs. IDC

CC453232A-330KL

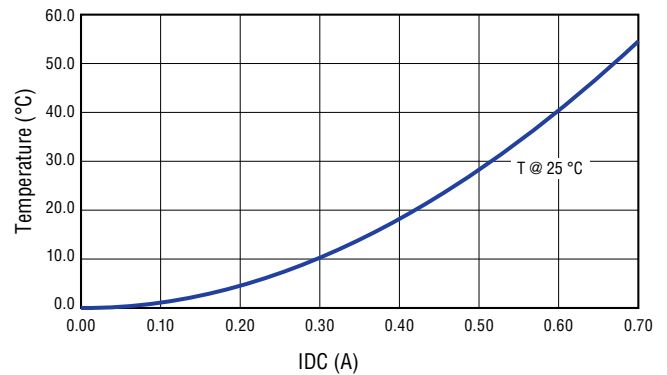


CC453232A-101KL

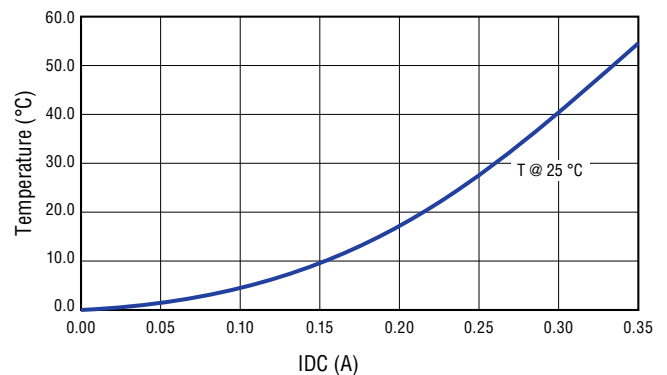


### Temperature Rise vs. IDC

CC453232A-330KL



CC453232A-101KL



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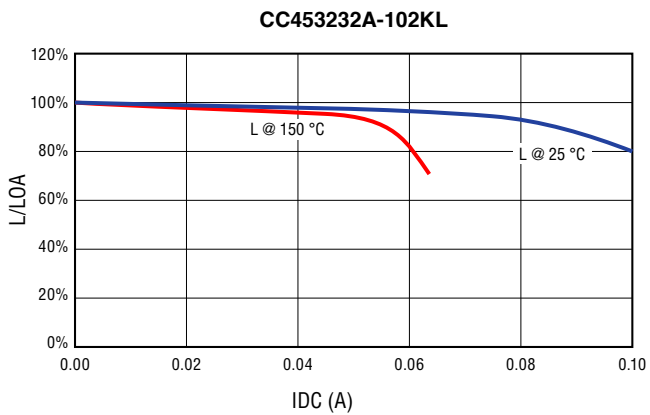
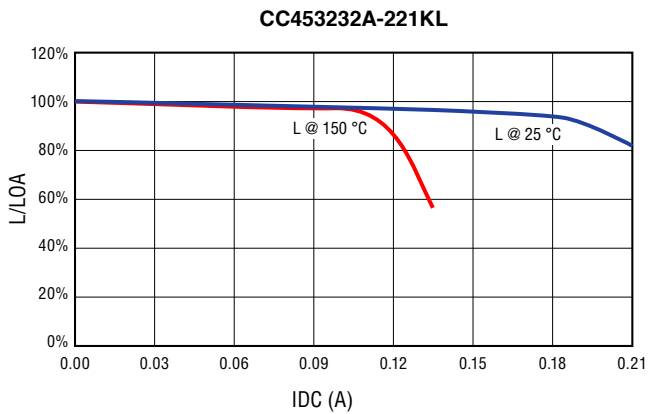
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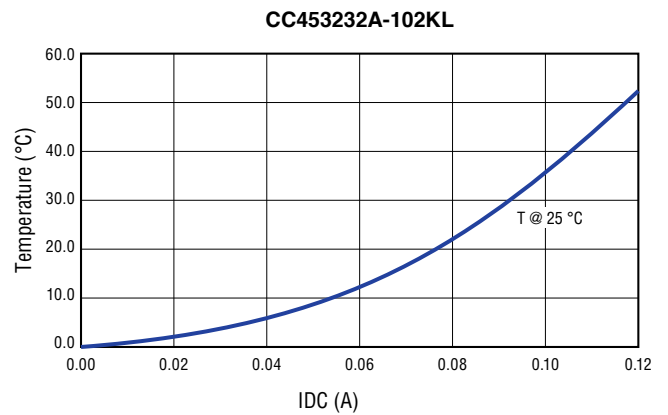
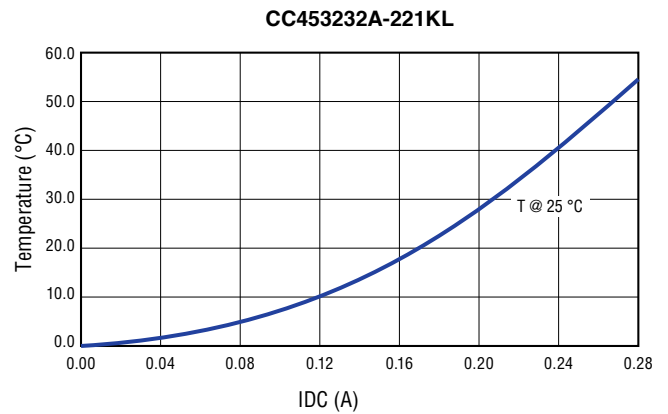
## CC453232A Series - Chip Inductors

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**L vs. IDC**



**Temperature Rise vs. IDC**



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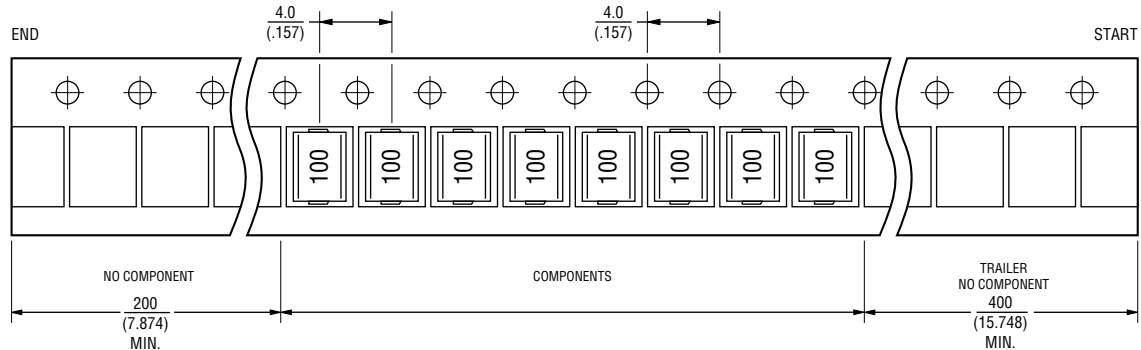
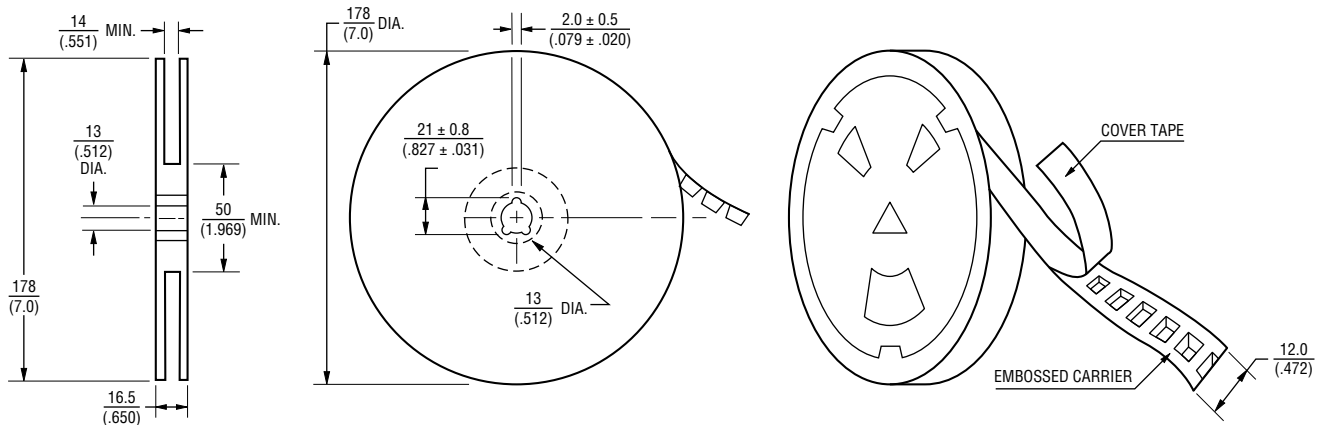
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## CC453232A Series - Chip Inductors

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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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