

### Features

- 0603 size
- Available in E12 series
- High Q - up to 80 typ.
- High operating temperature of 125 °C
- Small size of only 1.6 mm
- RoHS compliant\*

### Applications

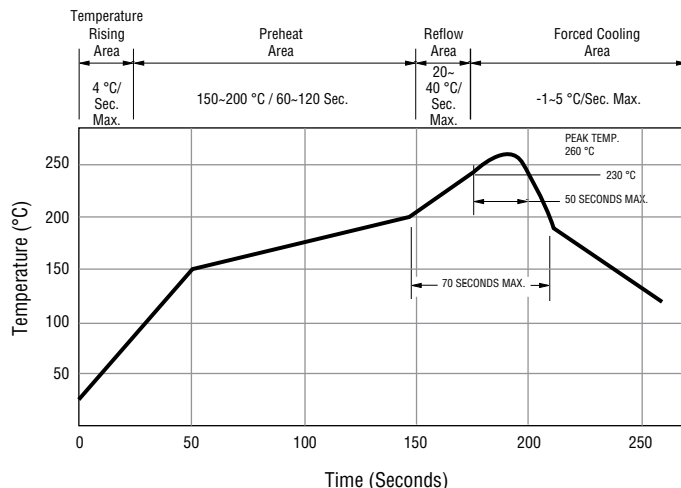
- Mobile phones
- Cellular phones
- CTV, VCR, HIC, FDD

## CW160808 Series - High Q Chip Inductors

### Electrical Specifications

| Bourns® Part No. | Inductance |        | Q  | Test Freq. (MHz) |     | SRF (MHz) | RDC   | I <sub>rms</sub> (mA) |
|------------------|------------|--------|----|------------------|-----|-----------|-------|-----------------------|
|                  | nH         | Tol. % |    | Min.             | L   |           |       |                       |
| CW160808-1N8M    | 1.8        | ±20    | 16 | 250              | 250 | 12500     | 0.045 | 700                   |
| CW160808-2N2D    | 2.2        | ±15    | 16 | 250              | 250 | 6900      | 0.080 | 700                   |
| CW160808-3N9J    | 3.9        | ±5     | 22 | 250              | 250 | 6900      | 0.080 | 700                   |
| CW160808-4N7J    | 4.7        | ±5     | 20 | 250              | 250 | 5800      | 0.130 | 700                   |
| CW160808-6N8J    | 6.8        | ±5     | 30 | 250              | 250 | 5800      | 0.110 | 700                   |
| CW160808-8N2J    | 8.2        | ±5     | 30 | 250              | 250 | 4600      | 0.100 | 700                   |
| CW160808-10NJ    | 10         | ±5     | 30 | 250              | 250 | 3800      | 0.130 | 700                   |
| CW160808-12NJ    | 12         | ±5     | 35 | 250              | 250 | 4000      | 0.130 | 700                   |
| CW160808-15NJ    | 15         | ±5     | 35 | 250              | 250 | 4000      | 0.170 | 700                   |
| CW160808-18NJ    | 18         | ±5     | 38 | 250              | 250 | 3100      | 0.170 | 700                   |
| CW160808-22NJ    | 22         | ±5     | 38 | 250              | 250 | 3000      | 0.220 | 700                   |
| CW160808-27NJ    | 27         | ±5     | 40 | 250              | 250 | 2800      | 0.220 | 600                   |
| CW160808-33NJ    | 33         | ±5     | 43 | 250              | 250 | 2300      | 0.220 | 600                   |
| CW160808-39NJ    | 39         | ±5     | 43 | 250              | 250 | 2200      | 0.250 | 600                   |
| CW160808-47NJ    | 47         | ±5     | 40 | 200              | 250 | 2000      | 0.280 | 600                   |
| CW160808-56NJ    | 56         | ±5     | 40 | 200              | 250 | 1900      | 0.310 | 600                   |
| CW160808-68NJ    | 68         | ±5     | 40 | 200              | 250 | 1700      | 0.340 | 600                   |
| CW160808-72NJ    | 72         | ±5     | 35 | 200              | 250 | 1700      | 0.490 | 400                   |
| CW160808-82NJ    | 82         | ±5     | 35 | 150              | 250 | 1700      | 0.540 | 400                   |
| CW160808-R10J    | 100        | ±5     | 35 | 150              | 250 | 1400      | 0.630 | 400                   |
| CW160808-R12J    | 120        | ±5     | 35 | 150              | 250 | 1300      | 0.650 | 300                   |
| CW160808-R15J    | 150        | ±5     | 35 | 150              | 150 | 1000      | 0.920 | 280                   |
| CW160808-R18J    | 180        | ±5     | 30 | 100              | 100 | 1000      | 1.250 | 240                   |
| CW160808-R22J    | 220        | ±5     | 30 | 100              | 100 | 1000      | 1.700 | 200                   |
| CW160808-R27J    | 270        | ±5     | 30 | 100              | 100 | 1000      | 1.800 | 170                   |

### Solder Profile



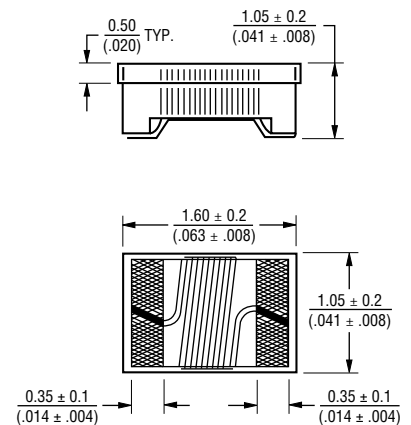
### General Specifications

Temperature Rise .....20 °C max. at rated current  
 Operating Temperature .....-40 °C to +125 °C  
 Storage Temperature .....-40 °C to +125 °C

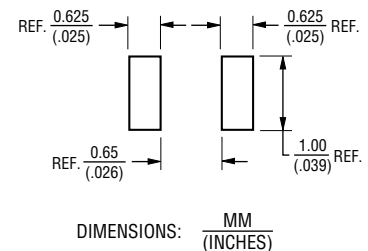
### Materials

Core Material ..... Alumina  
 Wire ..... Enameled copper  
 Terminal ..... Mo/Mn+Ni+Au  
 Encapsulate ..... Epoxy  
 Packaging ..... 3,000 pcs. per reel

### Product Dimensions



### Recommended Layout



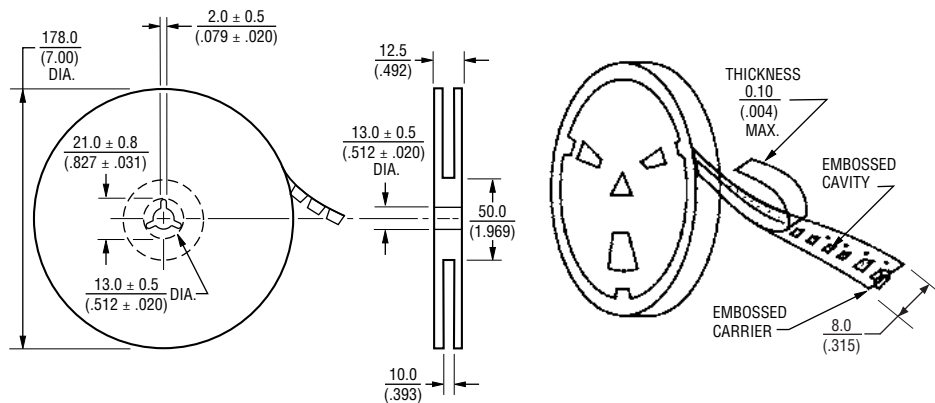
**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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# CW160808 Series - High Q Chip Inductors

**BOURNS®**

## Packaging Specifications



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

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