

### Features

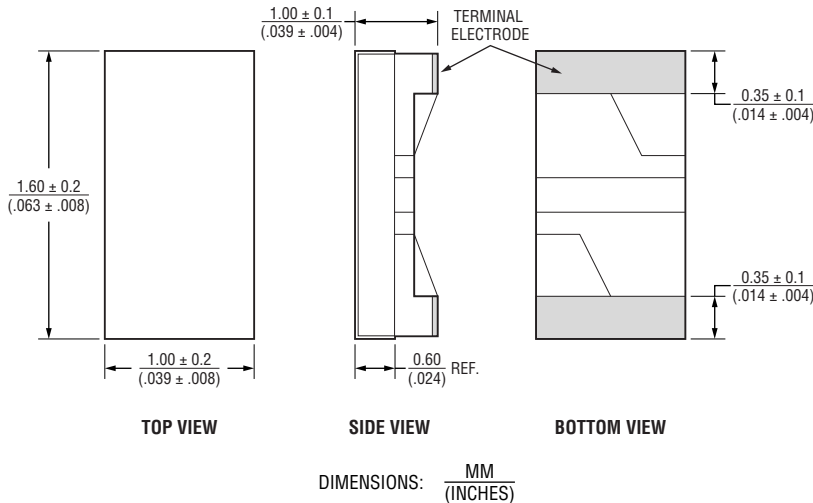
- Miniature size
- High Q value
- High self-resonant frequency
- Low DCR
- RoHS compliant\* and halogen free\*\*

## CWF1610 Series - 0603 Chip Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance		Q Typ.	L & Q Test Freq. / Voltage	SRF (MHz) Typ.	DCR (Ω) ±30 %	Irms (mA) Typ.	Isat (mA) Typ.
	L (μH)	Tol. %						
CWF1610-1R0K	1.0	10	16	7.9 MHz / 0.5 V	390	0.32	700	860
CWF1610-2R2K	2.2	10	16	7.9 MHz / 0.5 V	103	0.56	580	600
CWF1610-3R3K	3.3	10	16	7.9 MHz / 0.5 V	66	0.7	500	500
CWF1610-4R7K	4.7	10	16	7.9 MHz / 0.5 V	51	0.97	420	400
CWF1610-6R8K	6.8	10	16	7.9 MHz / 0.5 V	43	1.5	340	340
CWF1610-100K	10	10	14	2.5 MHz / 0.5 V	36	1.85	280	280
CWF1610-150K	15	10	14	2.5 MHz / 0.5 V	29	2.6	240	240
CWF1610-180K	18	10	14	2.5 MHz / 0.5 V	28	2.9	220	220
CWF1610-220K	22	10	14	2.5 MHz / 0.5 V	24	3.61	200	200

### Product Dimensions



### Additional Information

Click these links for more information:



### General Specifications

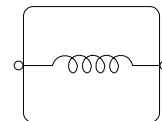
Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature (Component) ..... -40 °C to +125 °C  
 Temperature Rise .... 40 °C at rated Irms<sup>1</sup>  
 Rated Current ..... Inductance drops 20 % at Isat  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

Core..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging..... 4000 pcs. per 7-inch reel

### Electrical Schematic



### How to Order

**CWF1610 - 1R0K**  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_



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

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\* Bourns considers a product to be "halogen free" if  
 (a) the Bromine (Br) content is 900 ppm or less; (b)  
 the Chlorine (Cl) content is 900 ppm or less; and (c)  
 the total Bromine (Br) and Chlorine (Cl) content is  
 1500 ppm or less.

Specifications are subject to change without notice.  
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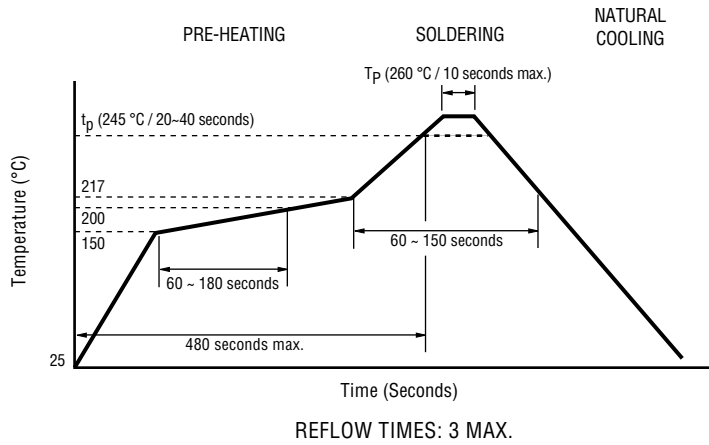
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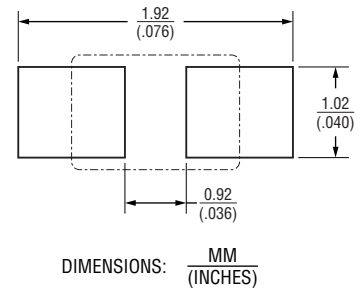
# CWF1610 Series - 0603 Chip Inductors



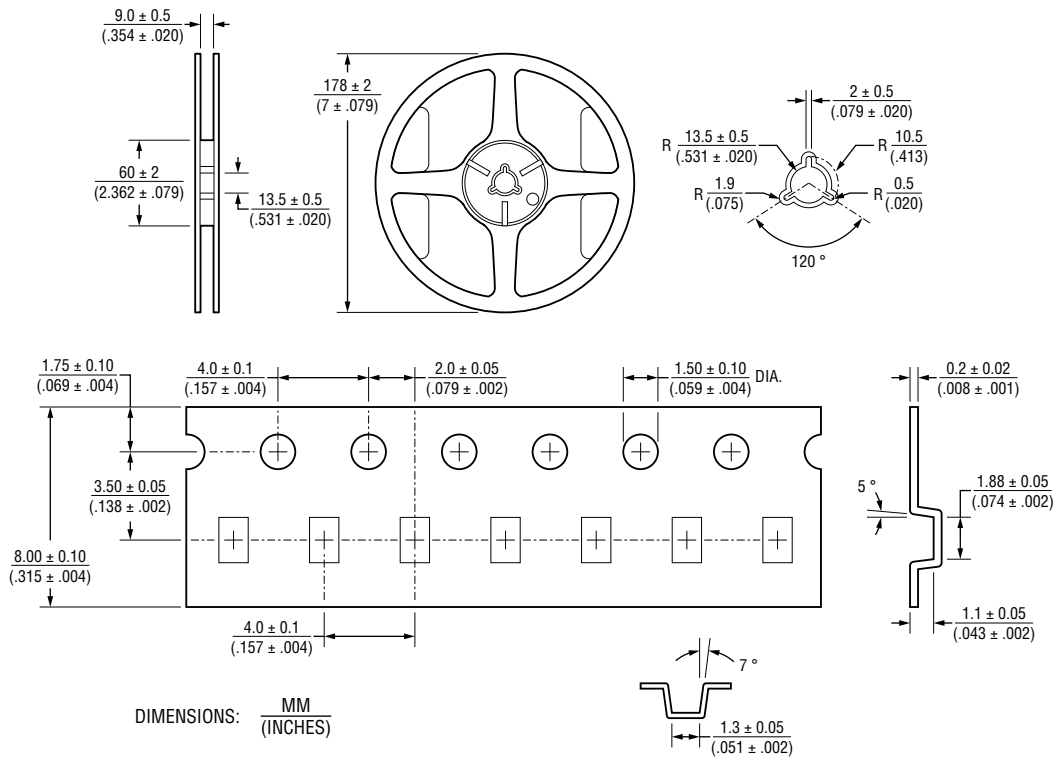
## Soldering Profile



## Recommended Layout



## Packaging Specifications



07/21

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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