

Features

- Ceramic core provides stable electrical characteristics
- High self-resonant frequency
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

CW161009A Series – 0603 Chip Inductors

Electrical Specifications @ 25 °C

Bourns® Part No.	Inductance		Q	Test Freq. (MHz)		SRF (MHz)	DCR (Ohms)	I _{rms} (mA)
	L (nH)	Tol.		Min.	L			
CW161009A-1N6D	1.6	±0.3 nH	18	250	250	12500	0.030	700
CW161009A-1N8D	1.8	±0.3 nH	16	250	250	8500	0.045	700
CW161009A-2N2D	2.2	±0.3 nH	13	250	250	8500	0.110	700
CW161009A-3N3J	3.3	±5 %	35	250	250	6000	0.045	700
CW161009A-3N6J	3.6	±5 %	22	250	250	6000	0.070	700
CW161009A-3N9J	3.9	±5 %	22	250	250	6900	0.070	700
CW161009A-4N3J	4.3	±5 %	22	250	250	5900	0.070	700
CW161009A-4N7J	4.7	±5 %	20	250	250	5800	0.080	700
CW161009A-5N1J	5.1	±5 %	18	250	250	5700	0.150	700
CW161009A-5N6J	5.6	±5 %	16	250	250	5500	0.190	700
CW161009A-6N2J	6.2	±5 %	25	250	250	5800	0.100	700
CW161009A-6N8J	6.8	±5 %	27	250	250	5800	0.100	700
CW161009A-7N5J	7.5	±5 %	28	250	250	4800	0.100	700
CW161009A-8N2J	8.2	±5 %	28	250	250	4700	0.100	700
CW161009A-8N7J	8.7	±5 %	28	250	250	4600	0.100	700
CW161009A-9N5J	9.5	±5 %	28	250	250	5400	0.100	700
CW161009A-10NJ	10.0	±5 %	31	250	250	4800	0.100	700
CW161009A-11NJ	11.0	±5 %	30	250	250	4000	0.100	700
CW161009A-12NJ	12.0	±5 %	32	250	250	4000	0.100	700
CW161009A-13NJ	13.0	±5 %	38	250	250	3600	0.100	700
CW161009A-15NJ	15.0	±5 %	35	250	250	4000	0.120	700
CW161009A-16NJ	16.0	±5 %	35	250	250	3300	0.120	700
CW161009A-18NJ	18.0	±5 %	35	250	250	3100	0.120	700
CW161009A-20NJ	20.0	±5 %	35	250	250	3100	0.120	700
CW161009A-22NJ	22.0	±5 %	35	250	250	3000	0.150	700
CW161009A-23NJ	23.0	±5 %	38	250	250	2850	0.140	700
CW161009A-24NJ	24.0	±5 %	35	250	250	2650	0.140	700
CW161009A-27NJ	27.0	±5 %	35	250	250	2800	0.200	600
CW161009A-30NJ	30.0	±5 %	37	250	250	2250	0.144	600
CW161009A-33NJ	33.0	±5 %	36	250	250	2300	0.200	600
CW161009A-36NJ	36.0	±5 %	36	250	250	2080	0.200	600
CW161009A-39NJ	39.0	±5 %	36	250	250	2200	0.210	600
CW161009A-43NJ	43.0	±5 %	38	250	250	2000	0.220	600
CW161009A-47NJ	47.0	±5 %	35	200	200	2000	0.230	600
CW161009A-51NJ	51.0	±5 %	32	200	200	1950	0.240	600
CW161009A-56NJ	56.0	±5 %	32	200	200	1900	0.250	600
CW161009A-68NJ	68.0	±5 %	32	200	200	1700	0.350	600
CW161009A-72NJ	72.0	±5 %	34	150	150	1700	0.490	400
CW161009A-82NJ	82.0	±5 %	30	150	150	1700	0.580	400
CW161009A-R10J	100.0	±5 %	34	150	150	1400	0.580	400
CW161009A-R11J	110.0	±5 %	33	150	150	1350	0.610	300
CW161009A-R12J	120.0	±5 %	30	150	150	1300	0.650	300
CW161009A-R15J	150.0	±5 %	30	100	100	990	0.850	280
CW161009A-R18J	180.0	±5 %	25	100	100	990	1.000	250
CW161009A-R22J	220.0	±5 %	25	100	100	900	1.800	250
CW161009A-R27J	270.0	±5 %	25	100	100	822	2.100	200
CW161009A-R33J	330.0	±5 %	25	100	100	500	2.300	150
CW161009A-R39J	390.0	±5 %	25	100	100	350	2.900	130

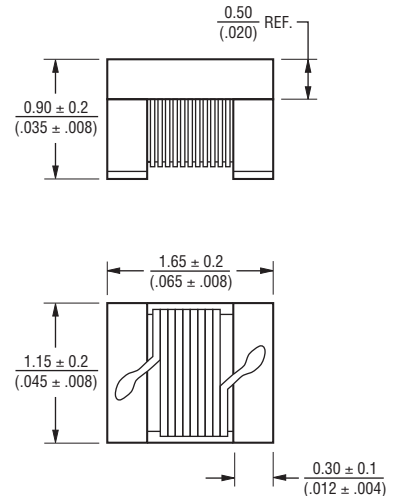
General Specifications

Operating Temperature-40 °C to +125 °C
(Temperature rise included)
Storage Temperature-40 °C to +125 °C
Temperature Rise 15 °C at rated I_{rms}
Moisture Sensitivity Level 1
ESD Classification (HBM)..... N/A

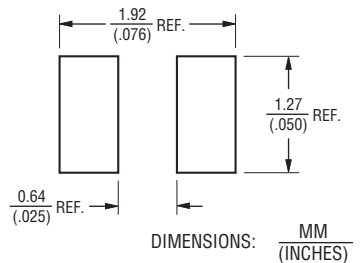
Materials

Core MaterialCeramic
WireEnameled copper (Class H)
Terminal Mo/Mn/Ni/Au
Packaging 3,000 pcs. per 7-inch reel

Product Dimensions



Recommended Layout



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

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

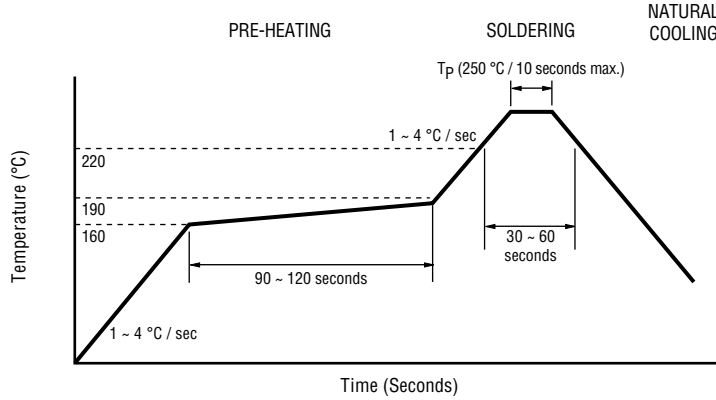
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice. 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.

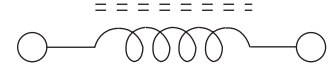
CW161009A Series – 0603 Chip Inductors



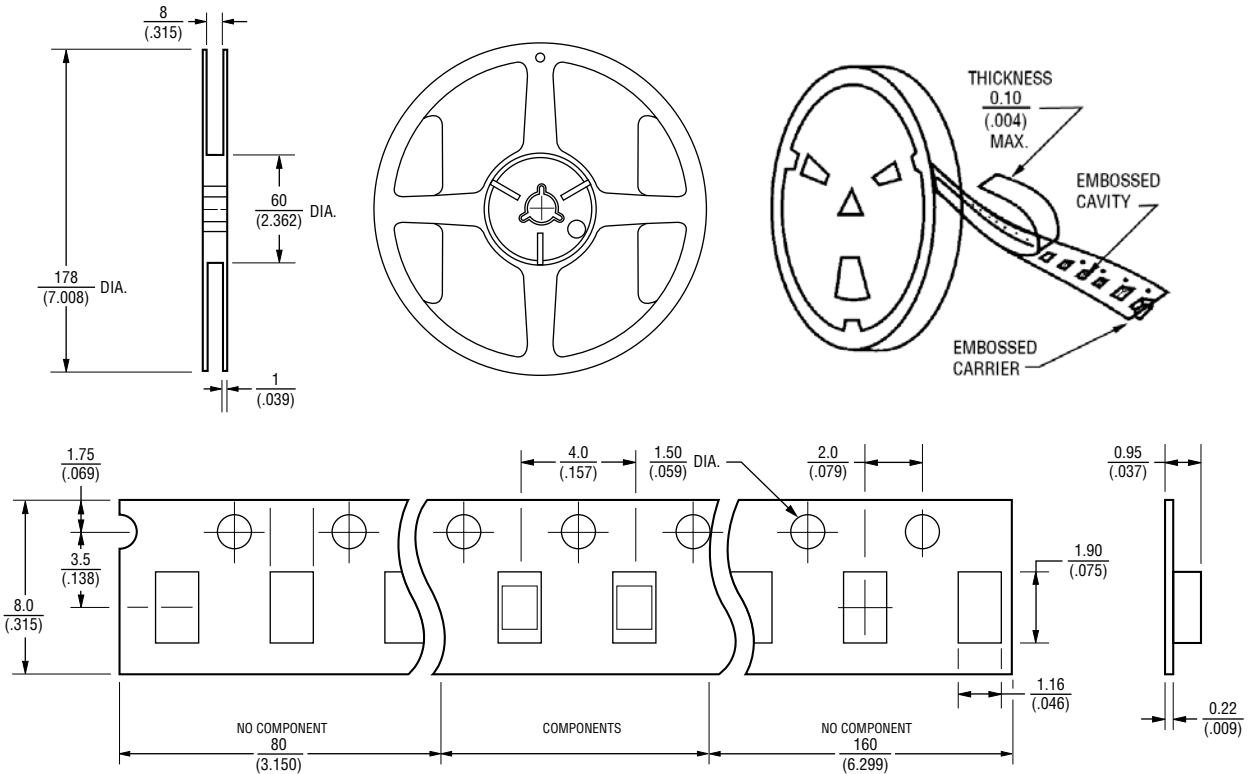
Solder Profile



Schematic



Packaging Specifications



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

USER DIRECTION OF FEED \rightarrow
QTY: 3,000 PCS PER REEL

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