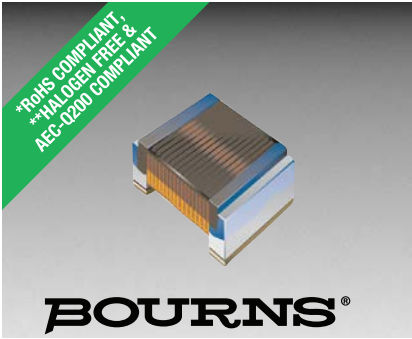




**THE DATASHEET OF
CW161009A-56NJ**





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

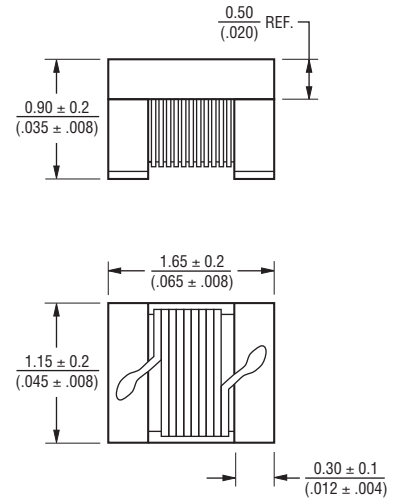
General Specifications

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

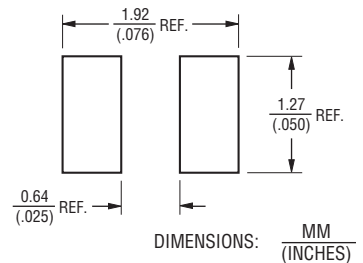
Materials

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.

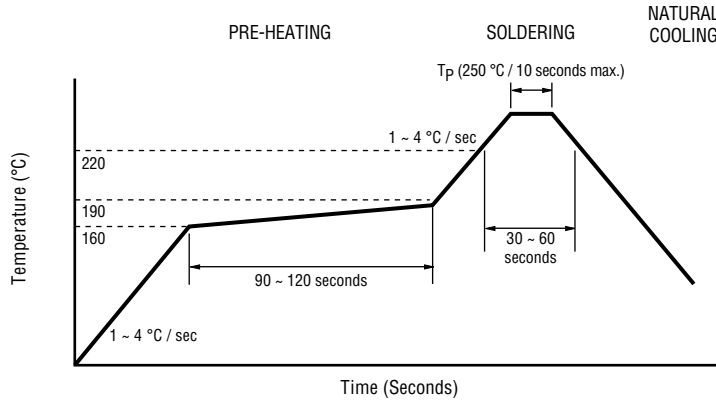
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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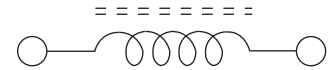
CW161009A Series – 0603 Chip Inductors



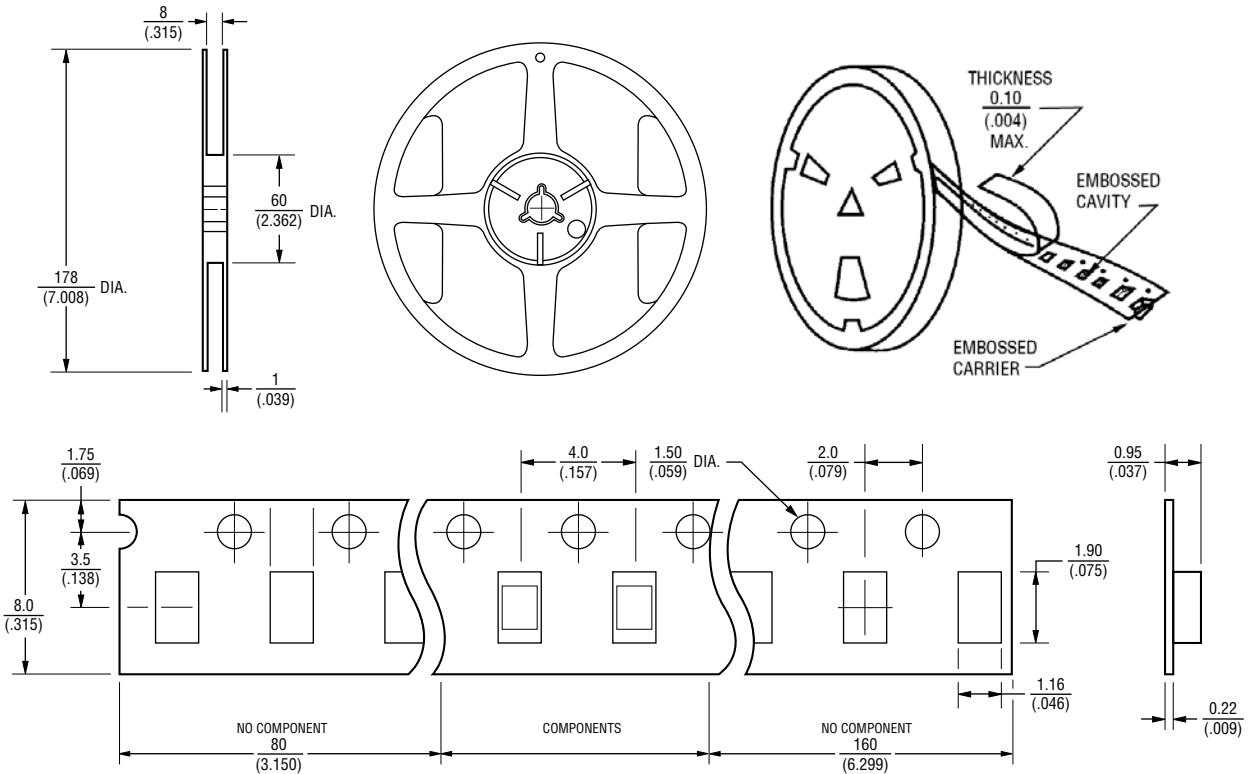
Solder Profile



Schematic



Packaging Specifications



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

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

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