



Features

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

CW105550A Series – 0402 Chip Inductors

Electrical Specifications @ 25 °C

Bourns® Part No.	Inductance		Q	Test Freq. (MHz)		SRF (MHz)	DCR (Ohms)		I _{rms} (mA)
	L (nH)	Tol.		L	Q		Min.	Max.	
CW105550A-1N0D	1.0	±0.3 nH	13	250	250	6000	0.045	0.045	1360
CW105550A-1N5D	1.5	±0.3 nH	16	250	250	6000	0.070	0.070	1040
CW105550A-1N9D	1.9	±0.3 nH	16	250	250	6000	0.070	0.070	1040
CW105550A-2N0D	2.0	±0.3 nH	16	250	250	6000	0.070	0.070	1040
CW105550A-2N2D	2.2	±0.3 nH	18	250	250	6000	0.070	0.070	960
CW105550A-2N4D	2.4	±0.3 nH	16	250	250	6000	0.068	0.068	790
CW105550A-2N7D	2.7	±0.3 nH	16	250	250	6000	0.120	0.120	860
CW105550A-3N3J	3.3	±5 %	20	250	250	6000	0.066	0.066	840
CW105550A-3N6J	3.6	±5 %	20	250	250	6000	0.066	0.066	840
CW105550A-3N9J	3.9	±5 %	20	250	250	5800	0.066	0.066	840
CW105550A-4N3J	4.3	±5 %	18	250	250	6000	0.091	0.091	700
CW105550A-4N7J	4.7	±5 %	15	250	250	4775	0.130	0.130	640
CW105550A-5N1J	5.1	±5 %	23	250	250	5800	0.083	0.083	800
CW105550A-5N6J	5.6	±5 %	23	250	250	5800	0.083	0.083	760
CW105550A-6N2J	6.2	±5 %	23	250	250	5800	0.083	0.083	760
CW105550A-6N8J	6.8	±5 %	20	250	250	4800	0.104	0.104	680
CW105550A-7N5J	7.5	±5 %	25	250	250	5800	0.104	0.104	680
CW105550A-8N2J	8.2	±5 %	25	250	250	4400	0.200	0.200	680
CW105550A-8N7J	8.7	±5 %	18	250	250	4100	0.104	0.104	480
CW105550A-9N0J	9.0	±5 %	25	250	250	4160	0.200	0.200	680
CW105550A-9N5J	9.5	±5 %	18	250	250	4000	0.200	0.200	680
CW105550A-10NJ	10	±5 %	23	250	250	3900	0.195	0.195	480
CW105550A-11NJ	11	±5 %	26	250	250	3680	0.120	0.120	640
CW105550A-12NJ	12	±5 %	26	250	250	3600	0.120	0.120	640
CW105550A-13NJ	13	±5 %	24	250	250	3450	0.210	0.210	560
CW105550A-15NJ	15	±5 %	26	250	250	3280	0.172	0.172	560
CW105550A-16NJ	16	±5 %	24	250	250	3100	0.220	0.220	560
CW105550A-18NJ	18	±5 %	25	250	250	3100	0.230	0.230	520
CW105550A-19NJ	19	±5 %	26	250	250	3040	0.202	0.202	480
CW105550A-20NJ	20	±5 %	25	250	250	3000	0.250	0.250	420
CW105550A-22NJ	22	±5 %	25	250	250	2800	0.300	0.300	400
CW105550A-23NJ	23	±5 %	26	250	250	2720	0.214	0.214	400
CW105550A-24NJ	24	±5 %	25	250	250	2700	0.300	0.300	400
CW105550A-27NJ	27	±5 %	26	250	250	2480	0.298	0.298	400
CW105550A-30NJ	30	±5 %	25	250	250	2350	0.300	0.300	400
CW105550A-33NJ	33	±5 %	24	250	250	2350	0.350	0.350	400
CW105550A-36NJ	36	±5 %	26	250	250	2320	0.403	0.403	320
CW105550A-39NJ	39	±5 %	25	250	250	2100	0.550	0.550	320
CW105550A-40NJ	40	±5 %	26	250	250	2240	0.438	0.438	320
CW105550A-43NJ	43	±5 %	25	250	250	2030	0.810	0.810	240
CW105550A-47NJ	47	±5 %	26	200	200	2100	0.830	0.830	210
CW105550A-51NJ	51	±5 %	25	200	200	1750	0.820	0.820	210
CW105550A-56NJ	56	±5 %	22	200	200	1760	0.970	0.970	200
CW105550A-68NJ	68	±5 %	22	200	200	1620	1.120	1.120	180
CW105550A-82NJ	82	±5 %	20	150	150	1500	1.250	1.250	150
CW105550A-91NJ	91	±5 %	20	150	150	1350	2.300	2.300	120
CW105550A-R10J	100	±5 %	20	150	150	1300	2.520	2.520	120
CW105550A-R12J	120	±5 %	20	150	150	1100	2.660	2.660	110

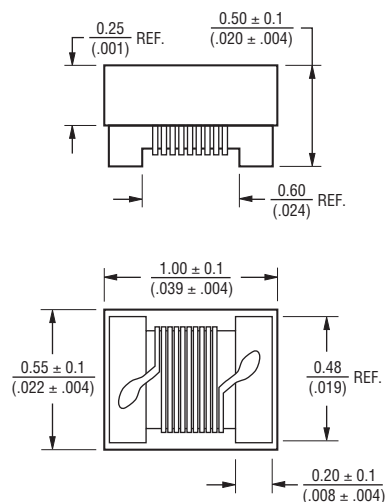
General Specifications

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

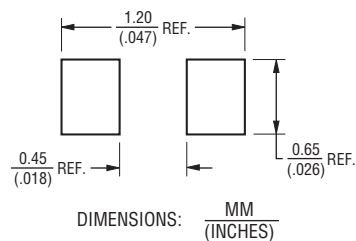
Materials

Core Material Ceramic
Wire Enameled copper (Class H)
Terminal Mo/Mn+Ni+Au
Packaging 10,000 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.

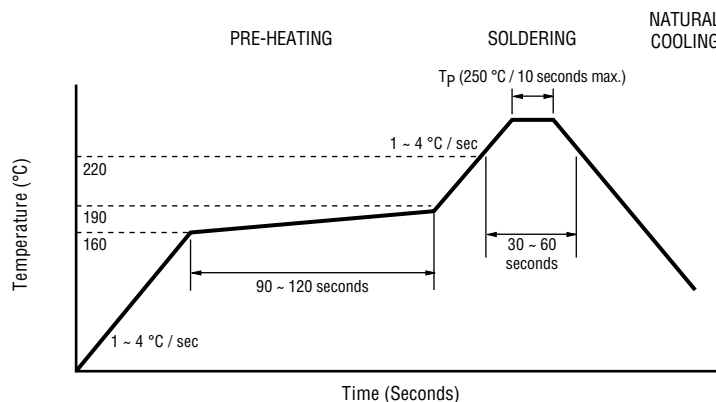
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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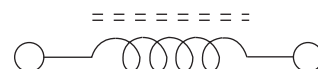
CW105550A Series – 0402 Chip Inductors

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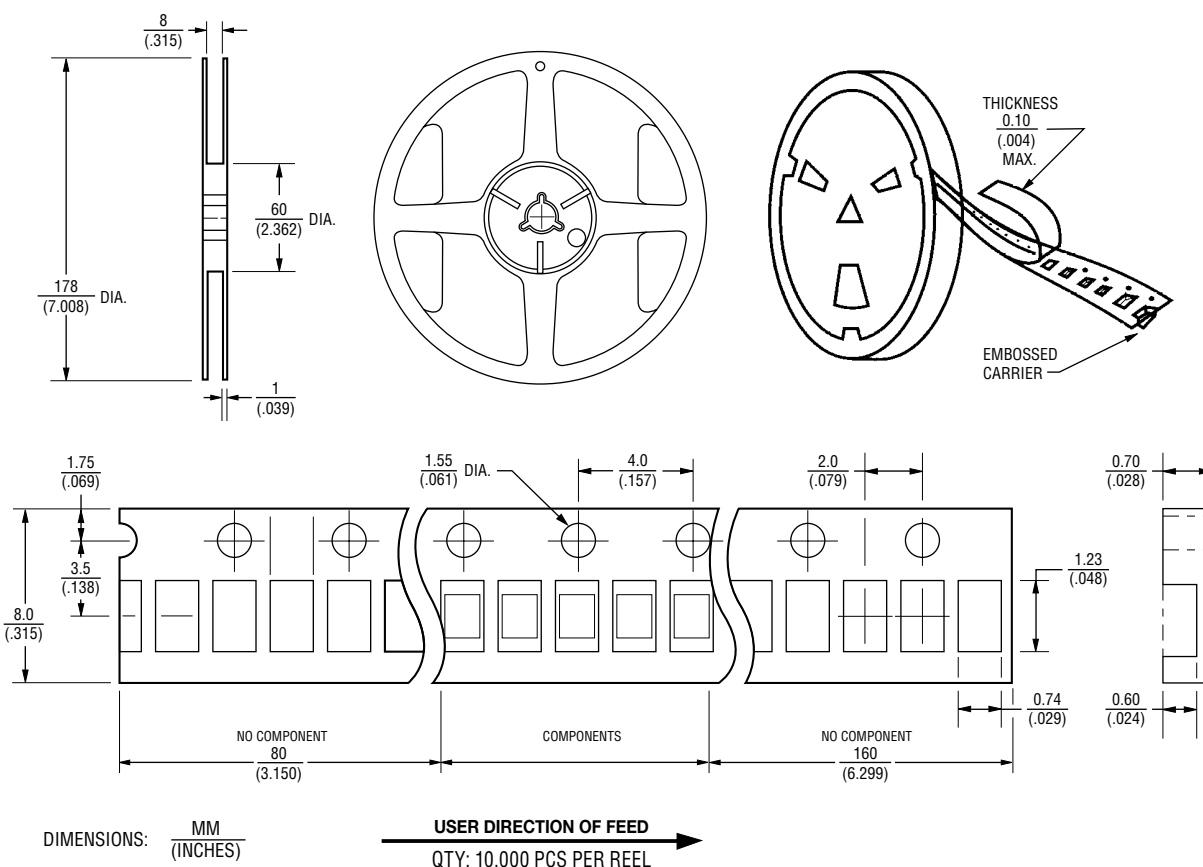
Solder Profile



Schematic



Packaging Specifications



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