

## 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 <sub>rms</sub> (mA)
	L (nH)	Tol.		Min.	L		Q	Min.	
CW105550A-1N0D	1.0	±0.3 nH	13	250	250	6000	0.045	1360	
CW105550A-1N5D	1.5	±0.3 nH	16	250	250	6000	0.070	1040	
CW105550A-1N9D	1.9	±0.3 nH	16	250	250	6000	0.070	1040	
CW105550A-2N0D	2.0	±0.3 nH	16	250	250	6000	0.070	1040	
CW105550A-2N2D	2.2	±0.3 nH	18	250	250	6000	0.070	960	
CW105550A-2N4D	2.4	±0.3 nH	16	250	250	6000	0.068	790	
CW105550A-2N7D	2.7	±0.3 nH	16	250	250	6000	0.120	860	
CW105550A-3N3J	3.3	±5 %	20	250	250	6000	0.066	840	
CW105550A-3N6J	3.6	±5 %	20	250	250	6000	0.066	840	
CW105550A-3N9J	3.9	±5 %	20	250	250	5800	0.066	840	
CW105550A-4N3J	4.3	±5 %	18	250	250	6000	0.091	700	
CW105550A-4N7J	4.7	±5 %	15	250	250	4775	0.130	640	
CW105550A-5N1J	5.1	±5 %	23	250	250	5800	0.083	800	
CW105550A-5N6J	5.6	±5 %	23	250	250	5800	0.083	760	
CW105550A-6N2J	6.2	±5 %	23	250	250	5800	0.083	760	
CW105550A-6N8J	6.8	±5 %	20	250	250	4800	0.104	680	
CW105550A-7N5J	7.5	±5 %	25	250	250	5800	0.104	680	
CW105550A-8N2J	8.2	±5 %	25	250	250	4400	0.200	680	
CW105550A-8N7J	8.7	±5 %	18	250	250	4100	0.104	480	
CW105550A-9N0J	9.0	±5 %	25	250	250	4160	0.200	680	
CW105550A-9N5J	9.5	±5 %	18	250	250	4000	0.200	680	
CW105550A-10NJ	10	±5 %	23	250	250	3900	0.195	480	
CW105550A-11NJ	11	±5 %	26	250	250	3680	0.120	640	
CW105550A-12NJ	12	±5 %	26	250	250	3600	0.120	640	
CW105550A-13NJ	13	±5 %	24	250	250	3450	0.210	560	
CW105550A-15NJ	15	±5 %	26	250	250	3280	0.172	560	
CW105550A-16NJ	16	±5 %	24	250	250	3100	0.220	560	
CW105550A-18NJ	18	±5 %	25	250	250	3100	0.230	520	
CW105550A-19NJ	19	±5 %	26	250	250	3040	0.202	480	
CW105550A-20NJ	20	±5 %	25	250	250	3000	0.250	420	
CW105550A-22NJ	22	±5 %	25	250	250	2800	0.300	400	
CW105550A-23NJ	23	±5 %	26	250	250	2720	0.214	400	
CW105550A-24NJ	24	±5 %	25	250	250	2700	0.300	400	
CW105550A-27NJ	27	±5 %	26	250	250	2480	0.298	400	
CW105550A-30NJ	30	±5 %	25	250	250	2350	0.300	400	
CW105550A-33NJ	33	±5 %	24	250	250	2350	0.350	400	
CW105550A-36NJ	36	±5 %	26	250	250	2320	0.403	320	
CW105550A-39NJ	39	±5 %	25	250	250	2100	0.550	320	
CW105550A-40NJ	40	±5 %	26	250	250	2240	0.438	320	
CW105550A-43NJ	43	±5 %	25	250	250	2030	0.810	240	
CW105550A-47NJ	47	±5 %	26	200	200	2100	0.830	210	
CW105550A-51NJ	51	±5 %	25	200	200	1750	0.820	210	
CW105550A-56NJ	56	±5 %	22	200	200	1760	0.970	200	
CW105550A-68NJ	68	±5 %	22	200	200	1620	1.120	180	
CW105550A-82NJ	82	±5 %	20	150	150	1500	1.250	150	
CW105550A-91NJ	91	±5 %	20	150	150	1350	2.300	120	
CW105550A-R10J	100	±5 %	20	150	150	1300	2.520	120	
CW105550A-R12J	120	±5 %	20	150	150	1100	2.660	110	

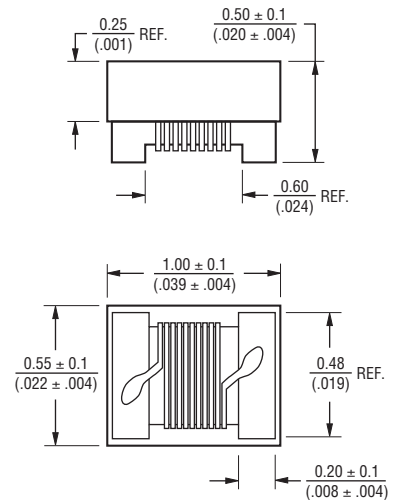
### General Specifications

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

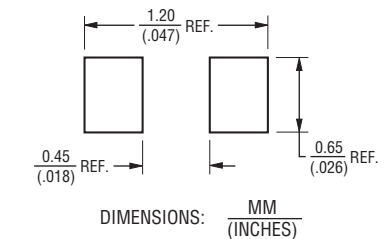
### Materials

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](http://www.P65Warnings.ca.gov)

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

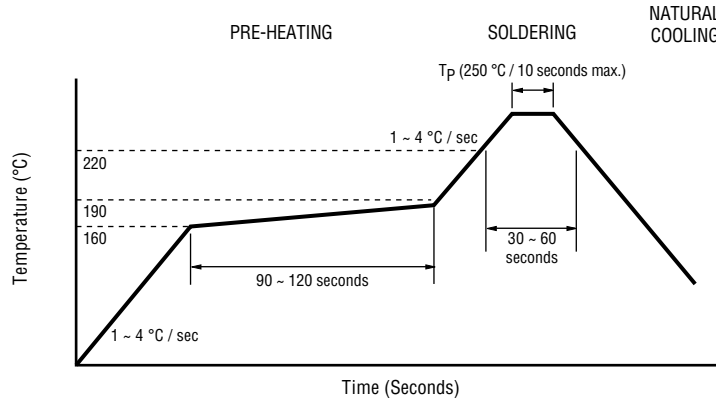
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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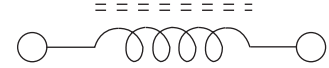
# CW10550A Series – 0402 Chip Inductors

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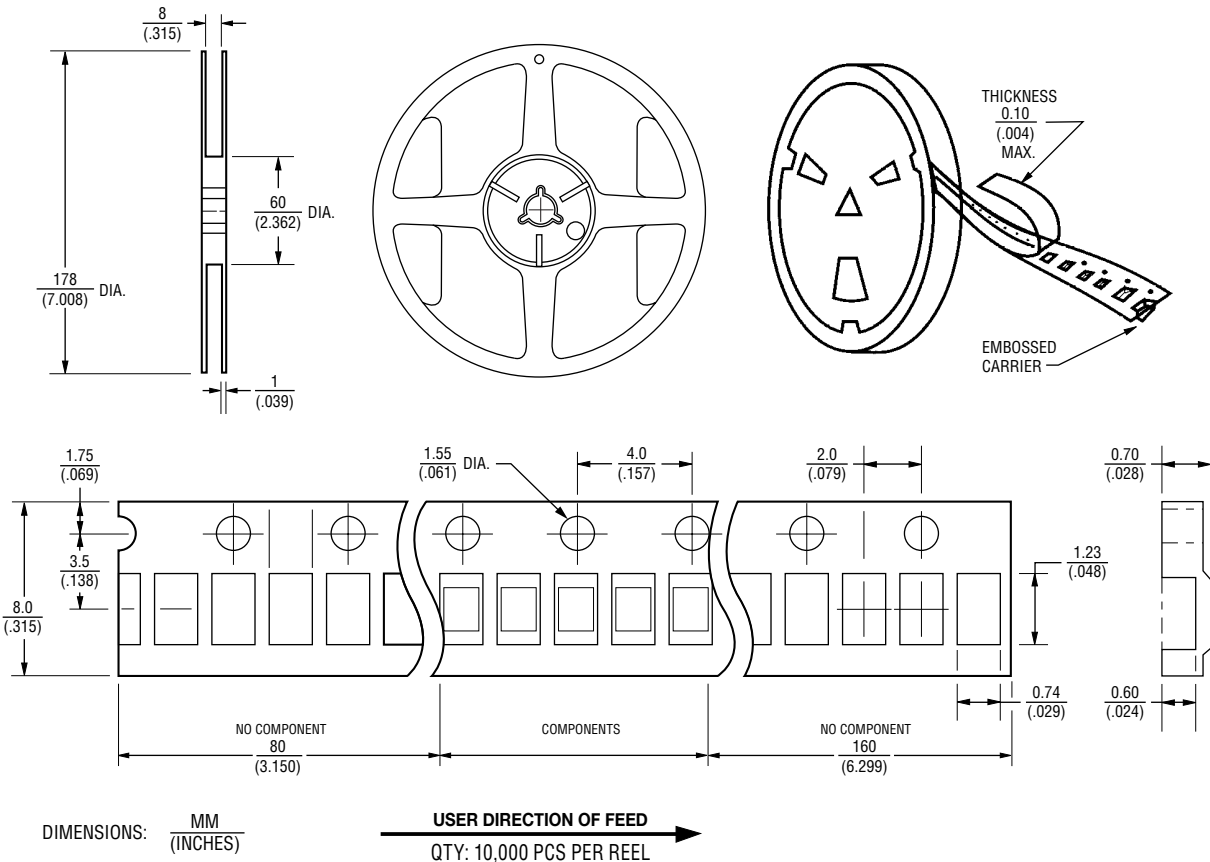
## Solder Profile



## Schematic



## Packaging Specifications



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