

### Features

- 0402 miniature size
- Ceramic core provides stable electrical characteristics
- High Q
- High self-resonant frequency
- Flat top surface for automated assembly
- RoHS compliant\* and halogen free\*\*

### Applications

- RF modules
- Cellular phones
- GPS receivers
- Wireless PDAs, LANs
- CATV filters, tuners
- Cable modems, set-top boxes

## CW100505 Series High Q Ceramic Chip Inductors

### Electrical Specifications

Bourns® Part No.	Inductance		Q	Test Freq. (MHz)	SRF (MHz)	DCR (Ohms)	Irms (mA)
	L (nH)	Tol.	Min.	L / Q	Min.		Max.
CW100505-1N0D	1.0	±0.3 nH	13	250	6000	0.045	1360
CW100505-2N2D	2.2	±0.3 nH	18	250	6000	0.070	960
CW100505-2N7D	2.7	±0.3 nH	16	250	6000	0.120	640
CW100505-3N3J	3.3	±5 %	20	250	6000	0.066	840
CW100505-3N9J	3.9	±5 %	20	250	5800	0.066	840
CW100505-4N7J	4.7	±5 %	15	250	4775	0.130	640
CW100505-5N6J	5.6	±5 %	23	250	5800	0.083	760
CW100505-6N8J	6.8	±5 %	20	250	4800	0.083	680
CW100505-8N2J	8.2	±5 %	25	250	4400	0.104	680
CW100505-10NJ	10.0	±5 %	23	250	3900	0.195	480
CW100505-12NJ	12.0	±5 %	26	250	3600	0.120	640
CW100505-15NJ	15.0	±5 %	26	250	3280	0.172	560
CW100505-18NJ	18.0	±5 %	25	250	3100	0.230	420
CW100505-22NJ	22.0	±5 %	25	250	2800	0.300	400
CW100505-27NJ	27.0	±5 %	26	250	2480	0.298	400
CW100505-33NJ	33.0	±5 %	24	250	2350	0.350	400
CW100505-39NJ	39.0	±5 %	25	250	2100	0.550	320
CW100505-47NJ	47.0	±5 %	26	200	2100	0.830	210
CW100505-56NJ	56.0	±5 %	22	200	1760	0.970	200
CW100505-68NJ	68.0	±5 %	22	200	1620	1.120	180
CW100505-82NJ	82.0	±5 %	20	150	1500	1.250	150
CW100505-R10J	100.0	±5 %	20	150	1300	2.520	120
CW100505-R12J	120.0	±5 %	20	150	1100	2.660	110

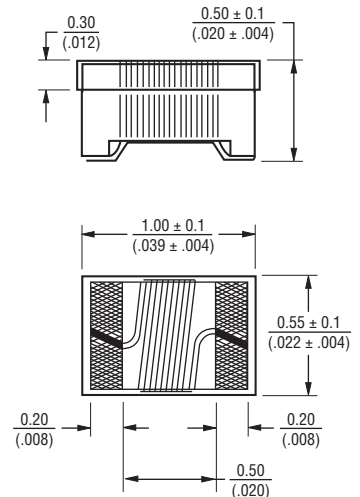
### General Specifications

Operating Temperature .....-55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .....-55 °C to +125 °C  
 Resistance to Soldering Heat ..... +260 °C, 5 sec. max.  
 Temperature Rise ..... 15 °C at rated Irms

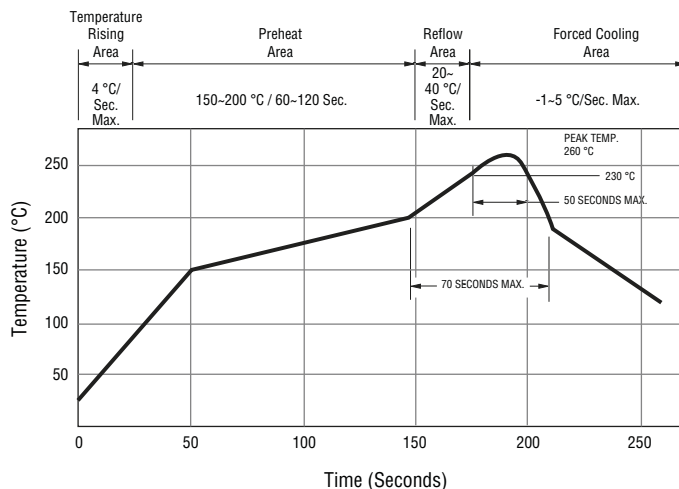
### Materials

Core.....Ceramic  
 Wire.....Enameled copper (Class H)  
 Terminal.....Mo/Mn+Ni+Au  
 Packaging.... 10,000 pcs. per 7-inch reel

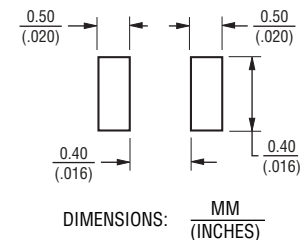
### Product Dimensions



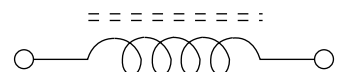
### Soldering Profile



### Recommended Layout



### Schematic



**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.

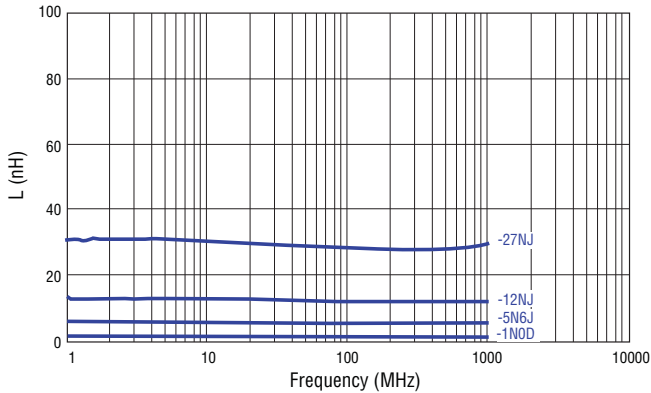
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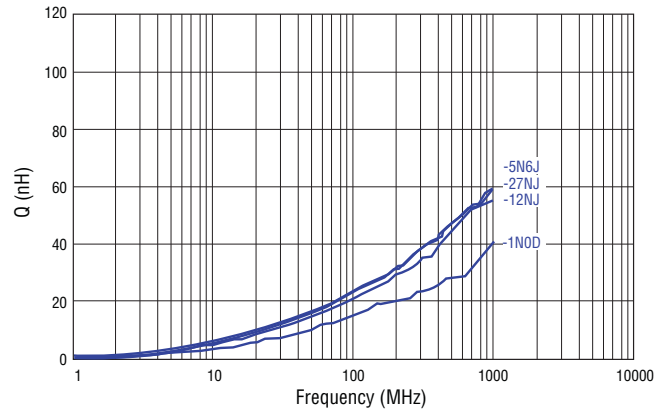
# CW100505 Series High Q Ceramic Chip Inductors

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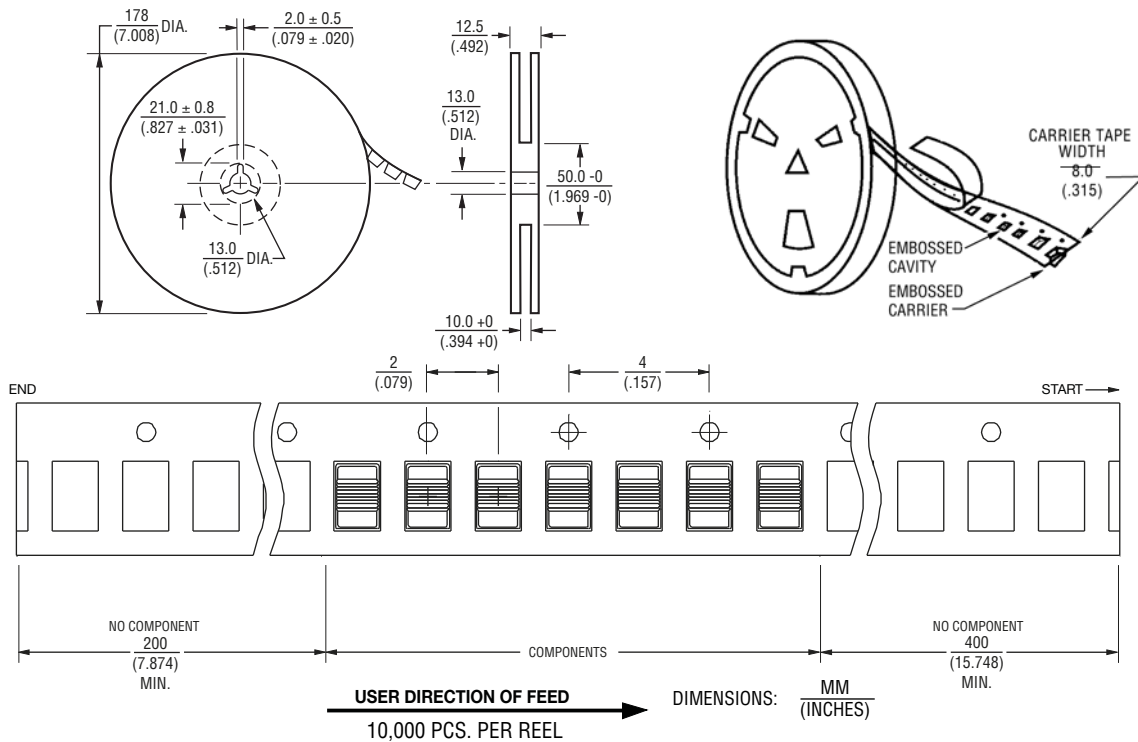
## L vs. Frequency



## Q vs. Frequency



## Packaging Specifications



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