

## Features

- 0805 size
- Available in E12 series
- High Q up to 80 typ.
- High operating temperature of 125 °C
- Small size of only 2.0 mm
- RoHS compliant\*

## Applications

- Mobile phones
- Cellular phones
- CTV, VCR, HIC, FDD

# CW201212 Series - High Q Chip Inductors

## Electrical Specifications

Bourns® Part No.	Inductance		Q	Test Freq. (MHz)		SRF (MHz)	RDC (Ohms)		I <sub>rms</sub> (mA)
	nH	Tol. %		L	Q		Min.	Max.	
CW201212-2N2J	2.2	±5	50	250	1500	8000	0.06	800	
CW201212-2N7J	2.7	±5	35	250	1000	6000	0.08	800	
CW201212-2N8J	2.8	±5	30	250	1000	5000	0.08	800	
CW201212-3N3J	3.3	±5	50	250	1000	7900	0.08	600	
CW201212-3N9J	3.9	±5	60	250	1000	6000	0.06	600	
CW201212-4N7J	4.7	±5	60	250	1000	5800	0.06	600	
CW201212-5N6J	5.6	±5	60	250	1000	5800	0.08	600	
CW201212-6N8J	6.8	±5	50	250	1000	5500	0.11	600	
CW201212-8N2J	8.2	±5	50	250	1000	4700	0.12	600	
CW201212-10NJ	10	±5	50	250	500	4300	0.12	600	
CW201212-12NJ	12	±5	50	250	500	4000	0.15	600	
CW201212-15NJ	15	±5	50	250	500	3400	0.17	600	
CW201212-18NJ	18	±5	50	250	500	3300	0.20	600	
CW201212-22NJ	22	±5	55	250	500	2600	0.22	500	
CW201212-27NJ	27	±5	55	250	500	2500	0.25	500	
CW201212-33NJ	33	±5	60	250	500	2050	0.27	500	
CW201212-39NJ	39	±5	60	250	500	2000	0.29	500	
CW201212-47NJ	47	±5	60	200	500	1650	0.31	500	
CW201212-56NJ	56	±5	60	200	500	1550	0.34	500	
CW201212-68NJ	68	±5	60	200	500	1450	0.38	500	
CW201212-82NJ	82	±5	60	150	500	1300	0.42	400	
CW201212-R10J	100	±5	60	150	500	1200	0.46	400	
CW201212-R12J	120	±5	50	150	250	1100	0.51	400	
CW201212-R15J	150	±5	50	100	250	920	0.56	400	
CW201212-R18J	180	±5	50	100	250	900	0.78	400	
CW201212-R22J	220	±5	50	100	250	860	1.00	400	
CW201212-R27J	270	±5	45	100	250	850	1.46	350	
CW201212-R33J	330	±5	45	100	250	800	1.65	300	
CW201212-R39J	390	±5	45	100	250	780	2.20	210	
CW201212-R47J	470	±5	33	50	100	375	1.76	250	
CW201212-R56J	560	±5	23	25	50	340	1.90	230	
CW201212-R68J	680	±5	23	25	50	215	2.20	190	
CW201212-R82J	820	±5	23	25	50	188	2.35	180	
CW201212-R91J	910	±5	22	25	50	180	3.00	180	

Note: 2 % tolerance available for inductance ranges of 12 nH and above.  
Replace "J" with "G".



**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. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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## Additional Information

Click these links for more information:



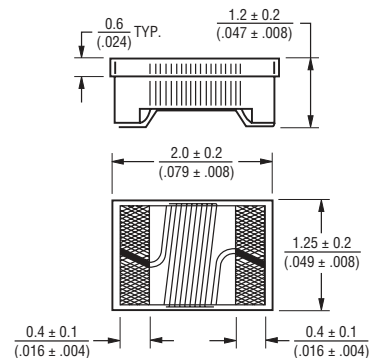
## General Specifications

Temperature Rise ..... 40 °C max. at rated current  
 Operating Temperature ..... -40 °C to +125 °C  
 Storage Temperature ..... -40 °C to +125 °C  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Resistance to Soldering Heat ..... +260 °C, 5 seconds  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

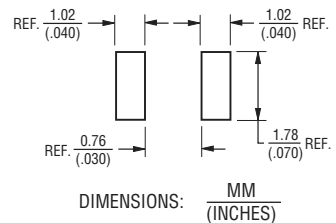
## Materials

Core Material  
 -2N2J through -R39J ..... Ceramic  
 -R47J through -R91J ..... Ferrite  
 Wire ..... Enameled copper (1W1E180)  
 Terminal ..... Mo/Mn+Ni+Au  
 Packaging ..... 2,000 pcs. per reel

## Product Dimensions



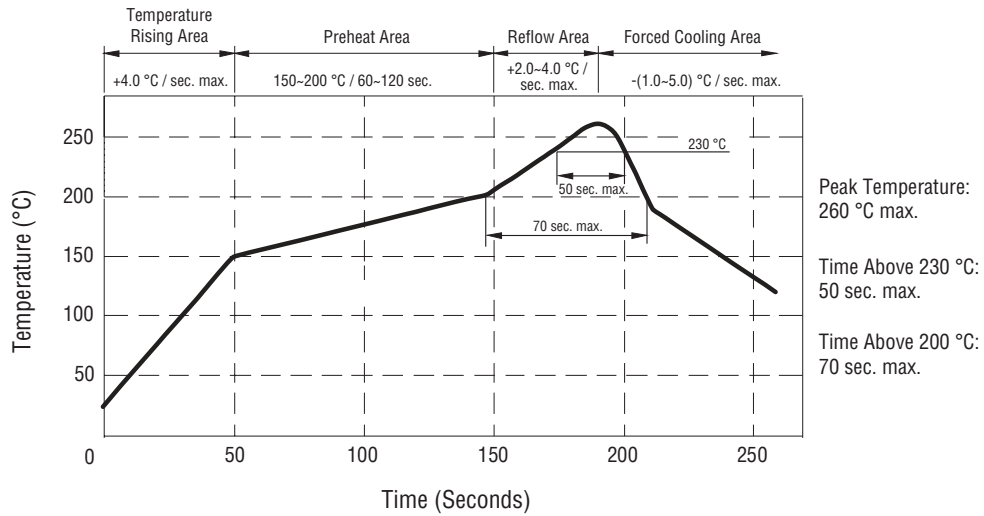
## Recommended Layout



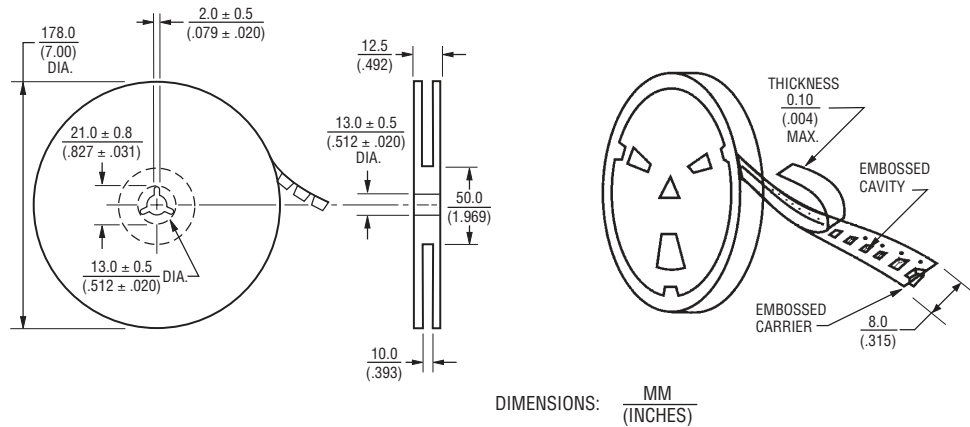
# CW201212 Series - High Q Chip Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 08/23

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