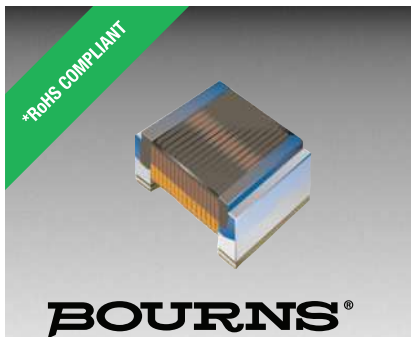




Features

- 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 _{rms} (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
CW201212-10N2J	10	±5	50	250	500	4300	0.12		600
CW201212-12N2J	12	±5	50	250	500	4000	0.15		600
CW201212-15N2J	15	±5	50	250	500	3400	0.17		600
CW201212-18N2J	18	±5	50	250	500	3300	0.20		600
CW201212-22N2J	22	±5	55	250	500	2600	0.22		500
CW201212-27N2J	27	±5	55	250	500	2500	0.25		500
CW201212-33N2J	33	±5	60	250	500	2050	0.27		500
CW201212-39N2J	39	±5	60	250	500	2000	0.29		500
CW201212-47N2J	47	±5	60	200	500	1650	0.31		500
CW201212-56N2J	56	±5	60	200	500	1550	0.34		500
CW201212-68N2J	68	±5	60	200	500	1450	0.38		500
CW201212-82N2J	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	188	2.20		190
CW201212-R82J	820	±5	23	25	50	215	2.35		180
CW201212-R91J	910	±5	35	25	50	200	2.13		180

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



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See 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.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Additional Information

Click these links for more information:



PRODUCT
SELECTOR



TECHNICAL
LIBRARY



INVENTORY



SAMPLES



CONTACT

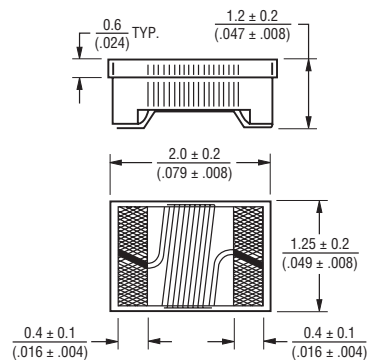
General Specifications

Temperature Rise
.....40 °C max. at rated current
Operating Temperature
.....-40 °C to +125 °C
Storage Temperature
.....-40 °C to +125 °C
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

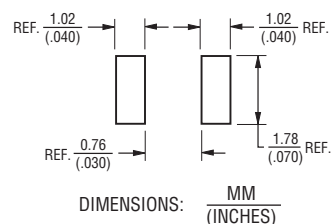
Materials

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

Product Dimensions



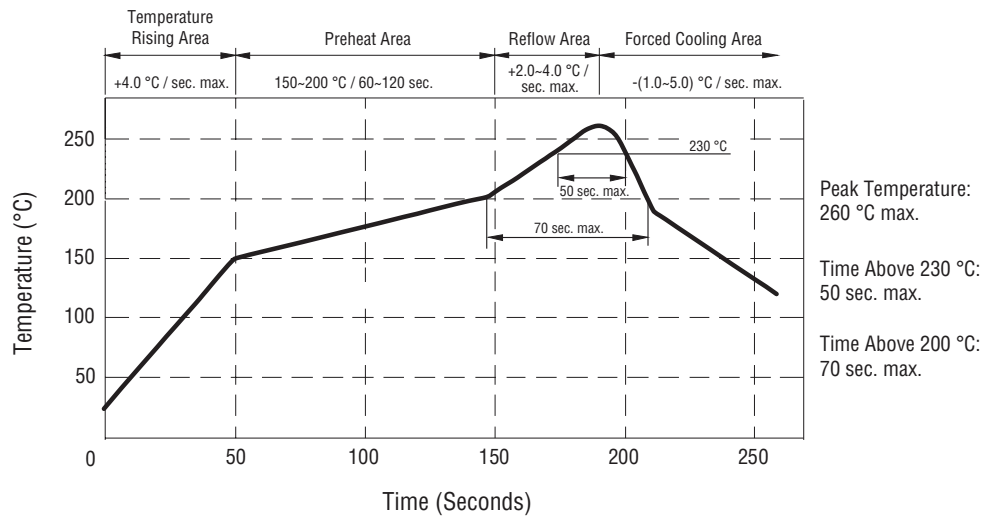
Recommended Layout



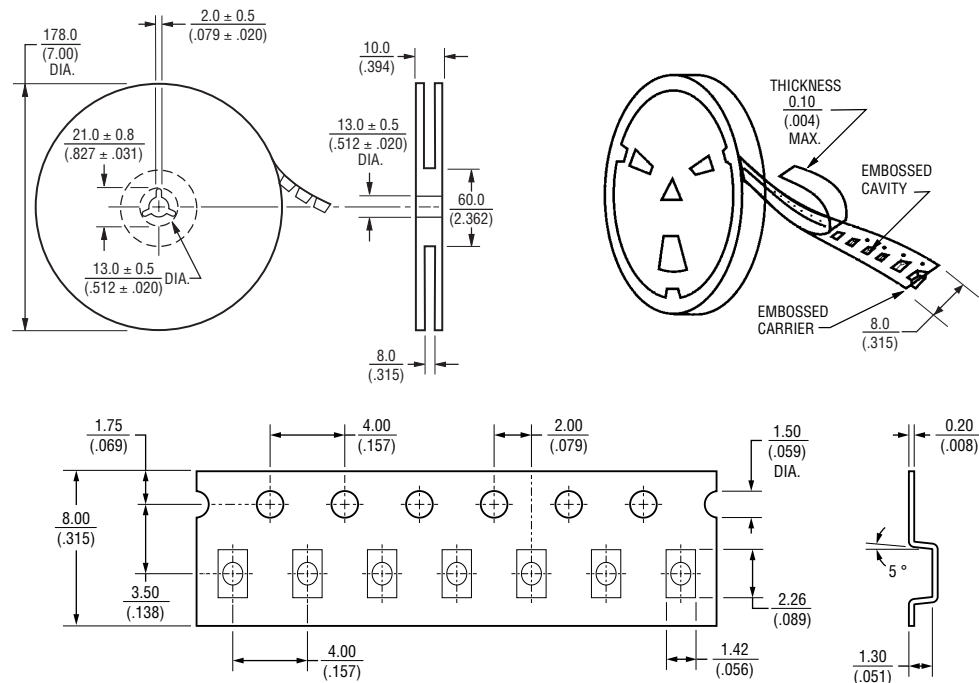
CW201212 Series - High Q Chip Inductors

BOURNS®

Soldering Profile



Packaging Specifications



USER DIRECTION OF FEED →

QTY: 2,000 PCS. PER REEL

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

REV. 07/26

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, "Bourns").

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain "typical" applications are based on Bourns' knowledge of typical requirements in generic applications. Bourns assumes that "typical" applications include failsafe/backup features to address critical risks to users and are designed to allow rework of Bourns® product to avoid scrap of a device solely due to malfunctioning Bourns® product. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user's application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Thus, users should always verify the actual performance of the Bourns® product in their specific devices and applications and make their own independent judgments regarding the suitability of Bourns® product and the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real-world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., IATF 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification even if such industry standard or qualification is a "state of art". Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage, such as without limitation nuclear, life-critical medical and certain automotive and aviation applications. Except as set forth in the bullet points below or unless expressly and specifically approved in writing on a case-by-case basis by an authorized Bourns' representative, use of any Bourns® products in such unauthorized high-risk applications is at the user's sole risk.

- Bourns considers implantable/invasive devices and devices/procedures designed as life-supporting or life-sustaining by the U.S. Food and Drug Administration or equivalent organizations outside of the United States as "life-critical" medical applications. Bourns expressly identifies those Bourns® standard products that are suitable for use in typical medical applications that are not life-critical in its publication entitled "Bourns Medical Grade Component Guide."
- Bourns expressly identifies those Bourns® standard products that are suitable for use in typical automotive applications associated with any Automate Safety Integrity Level (ASIL) in its publication entitled "Bourns Automotive Grade Component Guide." Bourns' designation of Bourns® product as compliant with the AEC-Q standard does not by itself mean that Bourns has approved such product for use in an automotive application.
- Bourns expressly identifies Bourns® standard products that are suitable for use in the typical aviation applications/systems requiring System Design Assurance Level (RTCA DO-254 DAL) of C, D or E in its publication entitled "Bourns Civilian Aerospace/Aviation Grade Component Guide." Bourns does not test its products for compliance with United States Federal Aviation Administration standards or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aviation applications. Use of Bourns® standard components in aviation applications associated with RTCA DO-254 DAL A or B without proper approval noted above shall be at the user's sole risk.
- Bourns will review and authorize on a case-by-case basis the use of Bourns® standard products which are at least AEC-Q compliant in space-related civil applications (rockets, satellites) with a negotiated cross-waiver and indemnity agreement.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

Use of Bourns® products or Bourns' technology in military/defense applications must be reviewed with Bourns for compliance with applicable export control laws and embargoes. Users shall not sell, transfer, export or re-export (which includes transfers within a country) any Bourns® products or technology or technical data for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor shall they use Bourns® products or technology or technical data in any facility which engages in activities relating to such devices. Further, Bourns® products and Bourns' technology and technical data may not under any circumstance be exported or re-exported to countries subject to international sanctions or embargoes. Bourns® products and technology may not, without prior authorization from Bourns and/or the Government of a country where such product/technology is designed and/or manufactured, be resold, transferred, or re-exported (including within the same country) to any party not eligible to receive commodities, software, and technical data originating in such country.

To the maximum extent permitted by applicable law, Bourns disclaims (i) any and all liability for special, punitive, consequential, incidental or indirect damages or lost revenues or lost profits, and (ii) any and all implied warranties (those not based on parameters specified in Bourns' data sheets and/or specifications), including implied warranties of fitness for particular purpose, non-infringement and merchantability.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

Web Page: <https://www.bourns.com/legal/disclaimers-terms-and-policies>

PDF: <https://www.bourns.com/docs/Legal/disclaimer.pdf>