Features

- Miniature size
- High self-resonant frequency
- High current
- Low DCR
- High Q
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

- Radio transmitters
- RF amplifiers
- Tuning applications
- High frequency applications
- Automotive systems

CW2012A Series – 0805 Chip Inductors

Electrical Specifications

Bourns Part No.	Inductance		Q	L @ Test Frequency (Hz)	Q @ Test Frequency (MHz)	SRF (MHz)	DCR (Ω)	Rated Current (mA)
	L (nH)	Tol.	Min.			Min.	Max.	Max.
CW2012A-2N0_	2.0	±0.2 nH, ±0.3 nH	70	0.1 V / 250 M	1500	8000	0.03	800
CW2012A-3N9_	3.9		70			5750	0.04	
CW2012A-4N7_	4.7		70			5750	0.04	
CW2012A-6N8_	6.8	±5 %, ± 10 %	70			5500	0.06	
CW2012A-7N5_	7.5		70		1000	4500	0.06	
CW2012A-8N2_	8.2		70			4700	0.06	
CW2012A-10N_	10		70			4200	0.08	600
CW2012A-12N_	12		80			4000	0.08	
CW2012A-15N_	15		80			3400	0.10	
CW2012A-18N_	18		80			3300	0.10	
CW2012A-22N_	22		60		500	2600	0.12	
CW2012A-24N_	24		60			2000	0.12	
CW2012A-27N_	27		60			2500	0.12	
CW2012A-33N_	33		60			2050	0.13	
CW2012A-36N_	36		65			1700	0.13	
CW2012A-39N_	39		65			2000	0.15	
CW2012A-43N_	43		65	0.1 V / 200 M		1650	0.15	
CW2012A-47N_	47		65			1650	0.17	
CW2012A-56N_	56		65			1550	0.19	
CW2012A-68N_	68		60			1450	0.22	500
CW2012A-82N_	82		55	0.1 V / 150 M		1300	0.40	400
CW2012A-R10_	100		55			1200	0.52	
CW2012A-R11_	110		55			1200	0.52	
CW2012A-R12_	120		50		250	1100	0.55	
CW2012A-R15_	150		50			920	0.73	
CW2012A-R18_	180		50	0.1 V / 100 M		870	0.88	
CW2012A-R22_	220		50			850	1.18	340
CW2012A-R24_	240		48			690	1.20	330
CW2012A-R27_	270		48			650	1.36	310
CW2012A-R33_	330		40			600	1.40	300
CW2012A-R39_	390		25			560	1.50	290
CW2012A-R47_	470		25	0.1 V / 50 M	100	375	1.76	250
CW2012A-R56_	560		23	0.1 V / 25 M		340	1.90	210
CW2012A-R62_	620		23			220	2.00	105
CW2012A-R68_	680		23			200	2.15	200
CW2012A-R75_	750		20			200	2.25	185
CW2012A-R82_	820		20			200	2.50	170
CW2012A-1R0_	1000		15		50	100	2.60	170

Note:
Underscore indicates Inductance Tolerance Code:
CW2012A-2N0_ ~ CW2012A-4N7_: B = ±0.2 nH, D = ±0.3 nH
CW2012A-6N8_ ~ CW2012A-1R0_: J = ±5 %, K = ±10 %

WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

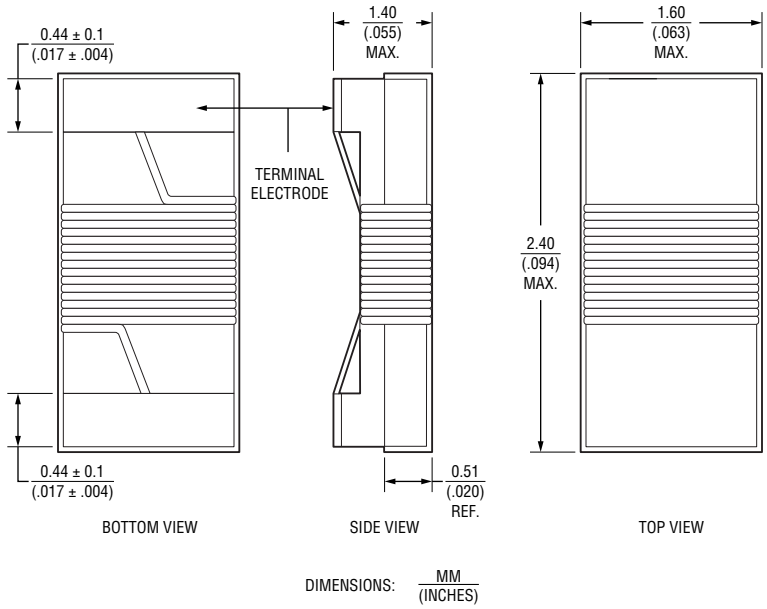
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
Specifications are 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

Product Dimensions



How to Order

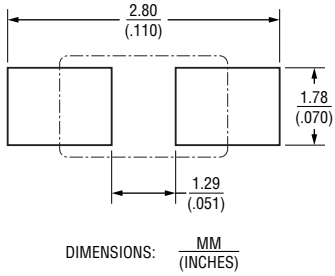
CW2012A - 2N0

Model

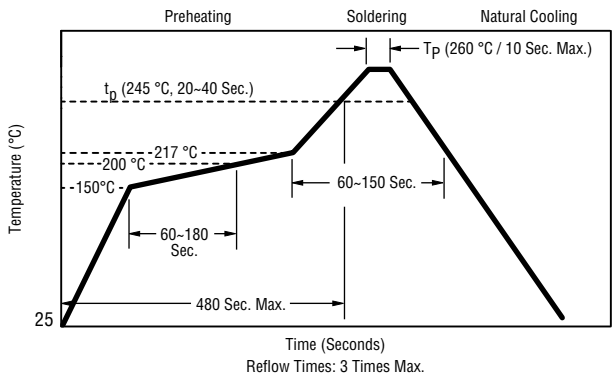
Inductance Value Code
(See Table)

Tolerance Code
CW2012A-2N0_ ~ CW2012A-4N7_:
B = ±0.2 nH, D = ±0.3 nH
CW2012A-6N8_ ~ CW2012A-1R0_:
J = ±5 %, K = ±10 %

Recommended Layout



Solder Profile



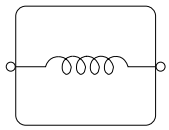
General Specifications

Operating Temperature
..... -55 °C to +125 °C
(Temperature rise included)
Storage Temperature
..... -55 °C to +125 °C
Rated Current
..... Inductance drops ≤20 %
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

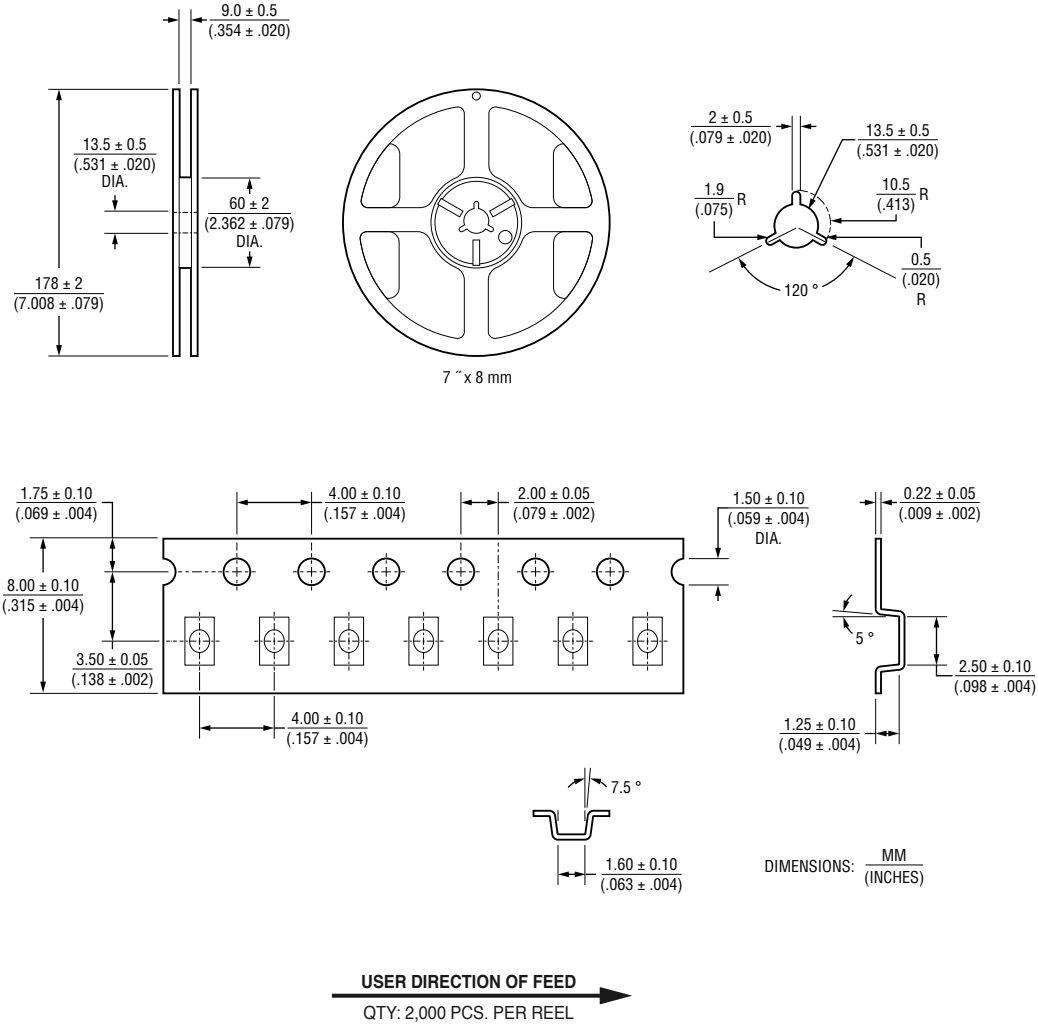
Materials

Core Material ..... Ceramic
Wire ..... Enameled copper
Terminal ..... Ag/Ni/Sn
Packaging ..... 2,000 pcs. per 7 ″ reel

Electrical Schematic



Packaging Specifications



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REV. 03/25

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