



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	70	5500			0.06				
CW2012A-7N5_	7.5	70	4500			0.06				
CW2012A-8N2_	8.2	70	4700		0.06	1000	4200	0.08	600	
CW2012A-10N_	10	70	4000		0.08					
CW2012A-12N_	12	80	3400		0.10					
CW2012A-15N_	15	80	3300		0.10					
CW2012A-18N_	18	80	2600		0.12					
CW2012A-22N_	22	60	2000		0.12	500	2050	0.12		500
CW2012A-24N_	24	60	1700		0.13					
CW2012A-27N_	27	60	2000		0.15					
CW2012A-33N_	33	60	1650		0.15					
CW2012A-36N_	36	65	1650		0.17					
CW2012A-39N_	39	65	1550	0.19	0.1 V / 200 M	1450	0.22	400		
CW2012A-43N_	43	65	1300	0.40						
CW2012A-47N_	47	65	1200	0.52						
CW2012A-56N_	56	60	1200	0.52						
CW2012A-68N_	68	55	1100	0.55						
CW2012A-82N_	82	±5 %, ±10 %	55	0.1 V / 150 M	250	920	0.73	340		
CW2012A-R10_	100		55			870	0.88			
CW2012A-R11_	110		55			850	1.18			
CW2012A-R12_	120		50			690	1.20			
CW2012A-R15_	150		50			650	1.36			
CW2012A-R18_	180		50	600	1.40					
CW2012A-R22_	220		50	560	1.50					
CW2012A-R24_	240		48	375	1.76					
CW2012A-R27_	270		48	340	1.90					
CW2012A-R33_	330		40	220	2.00					
CW2012A-R39_	390		25	200	2.15					
CW2012A-R47_	470		25	200	2.25					
CW2012A-R56_	560		23	200	2.50					
CW2012A-R62_	620		23	200	2.50					
CW2012A-R68_	680		23	100	100	2.60				
CW2012A-R75_	750	20								
CW2012A-R82_	820	20								
CW2012A-1R0_	1000	15								

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.

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Additional Information

Click these links for more information:

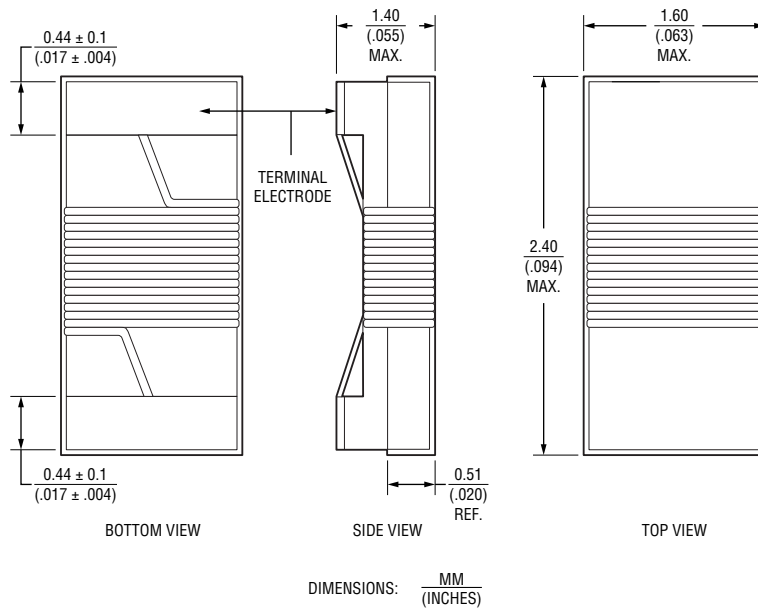


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CWF2012A Series – 0805 Chip Inductors



Product Dimensions



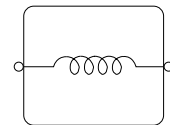
General Specifications

Operating Temperature	-55 °C to +125 °C
	(Temperature rise included)
Storage Temperature	-55 °C to +125 °C
Rated Current	Inductance drops $\leq 20\%$
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

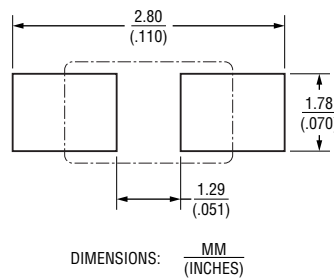
Electrical Schematic



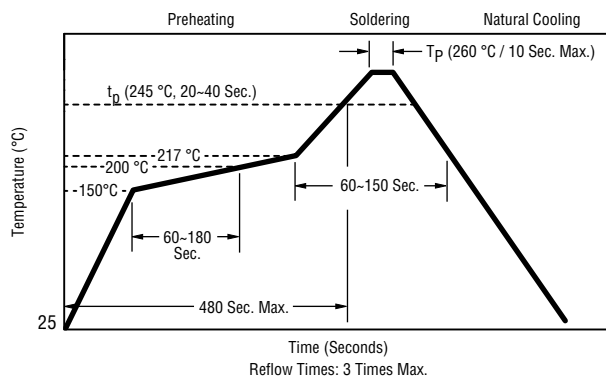
How to Order

Model **CW2012A - 2N0**
Inductance Value Code
 (See Table)
Tolerance Code
 CW2012A-2N0_ ~ CW2012A-4N7_ :
 B = ± 0.2 nH, D = ± 0.3 nH
 CW2012A-6N8_ ~ CW2012A-1R0_ :
 J = $\pm 5\%$, K = $\pm 10\%$

Recommended Layout



Solder Profile

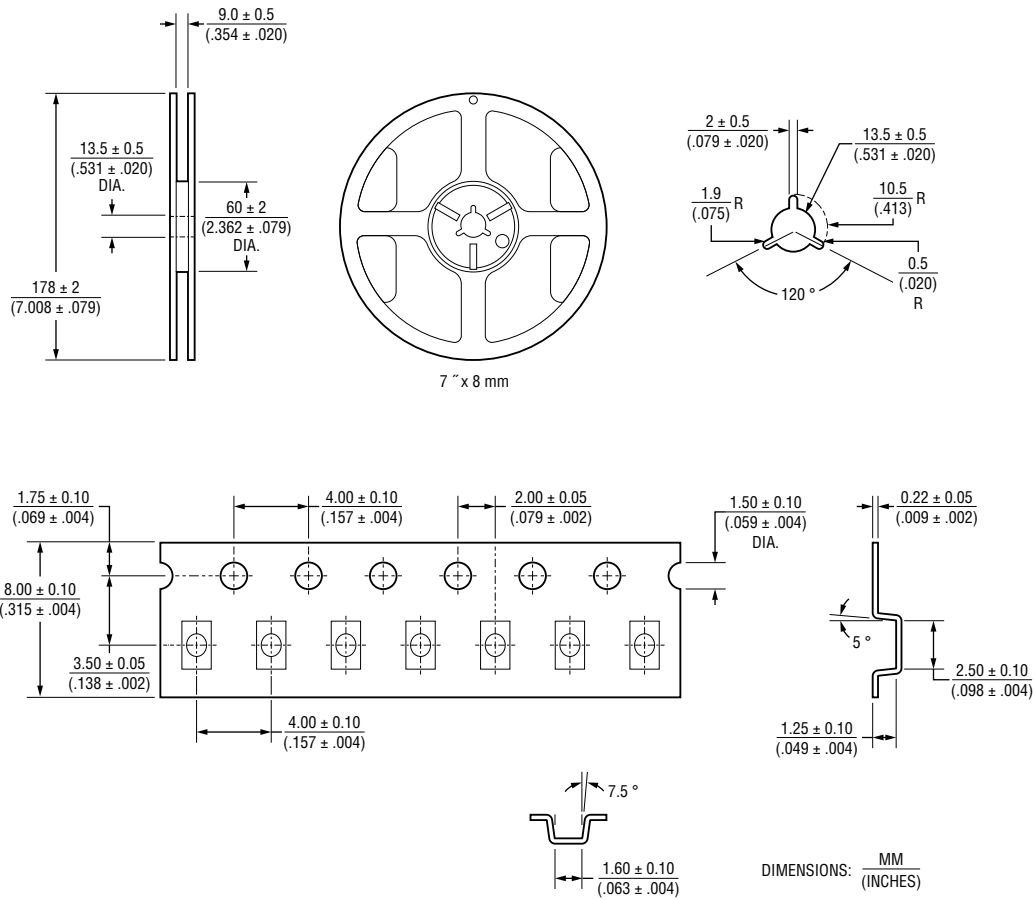


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CWF2012A Series – 0805 Chip Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED

QTY: 2,000 PCS. PER REEL

BOURNS®

Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

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REV. 03/25

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