



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	±5 %, ± 10 %	70		1000	4700	0.06	600	
CW2012A-10N_	10		70			4200	0.08		
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		500
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		
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		1100	0.55			
CW2012A-R15_	150		50	250	920	0.73			
CW2012A-R18_	180		50		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	0.1 V / 100 M	250	560	1.50	290		
CW2012A-R47_	470	25			0.1 V / 50 M	100	375	1.76	250
CW2012A-R56_	560	23					340	1.90	210
CW2012A-R62_	620	23					220	2.00	105
CW2012A-R68_	680	23	200	2.15			200		
CW2012A-R75_	750	20	0.1 V / 25 M	100	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.

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Additional Information

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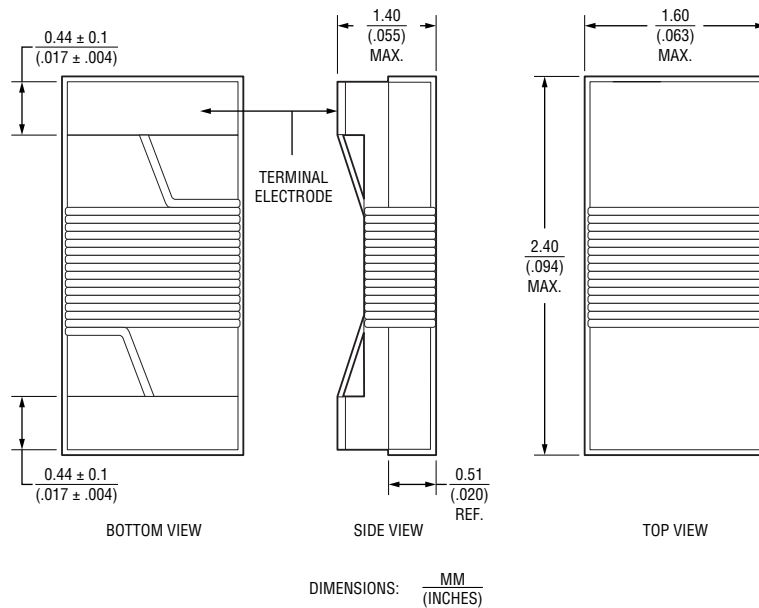
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CWF2012A Series – 0805 Chip Inductors

BOURNS®

Product Dimensions



How to Order

Model **CW2012A - 2N0**

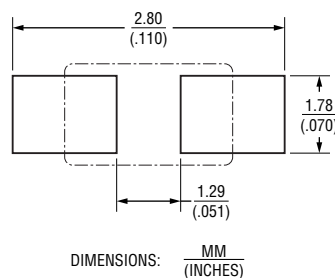
Inductance Value Code _____
(See Table)

Tolerance Code _____

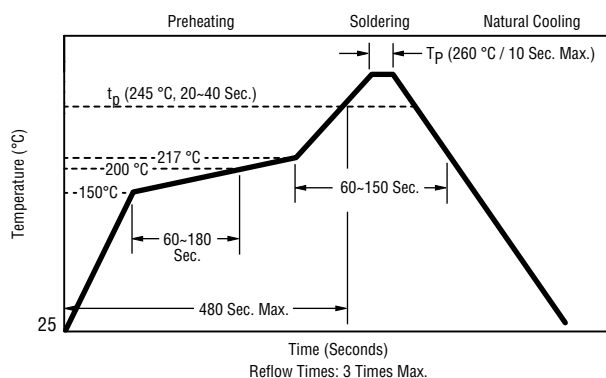
CW2012A-2N0_ ~ CW2012A-4N7_:
B = ±0.2 nH, D = ±0.3 nH

CW2012A-6N8_ ~ CW2012A-1R0_:
J = ±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

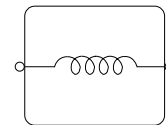
Core Material Ceramic

Wire Enameled copper

Terminal Ag/Ni/Sn

Packaging 2,000 pcs. per 7" reel

Electrical Schematic



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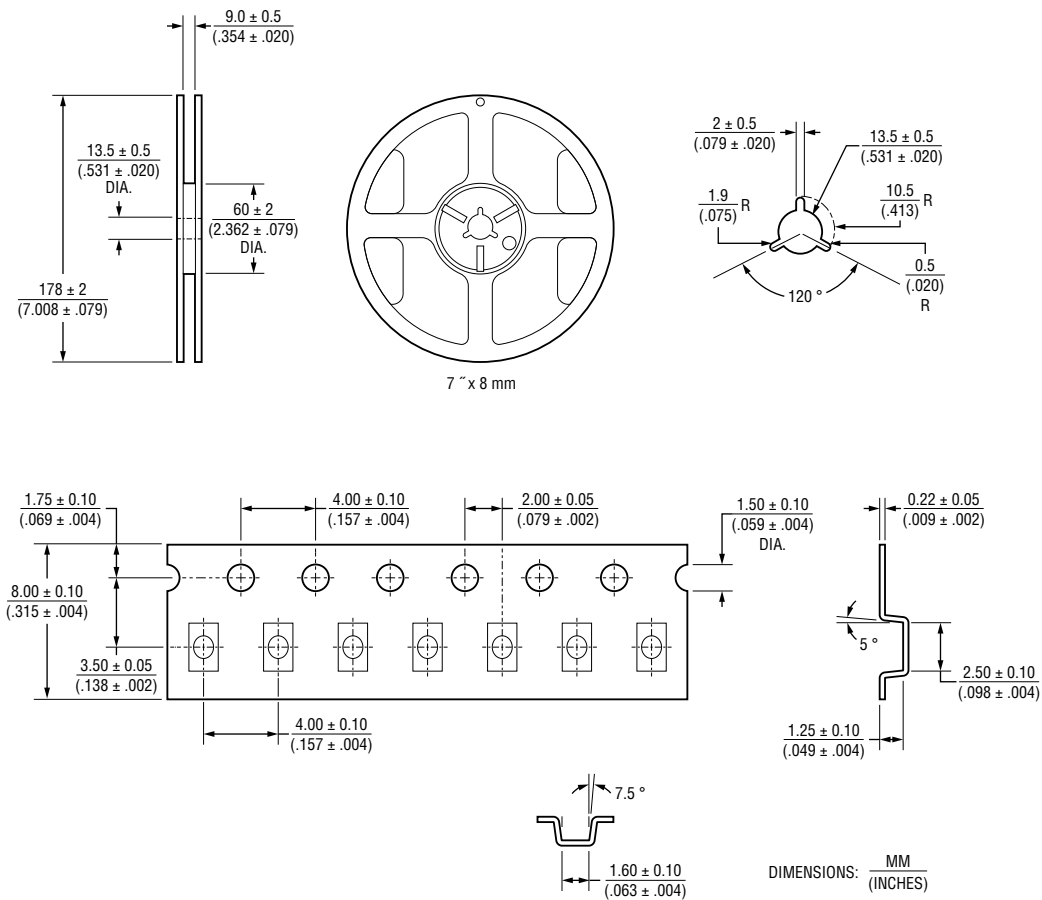
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CWF2012A Series – 0805 Chip Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED

QTY: 2,000 PCS. PER REEL

BOURNS®

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REV. 03/25

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