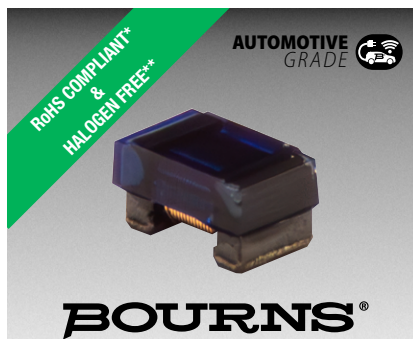




Features

- 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		
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	600	
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		500
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	0.1 V / 100 M		250	920		0.73
CW2012A-R18_	180		50		870		0.88		
CW2012A-R22_	220		50		850		1.18		
CW2012A-R24_	240		48		690		1.20		
CW2012A-R27_	270		48		650		1.36		
CW2012A-R33_	330		40		600		1.40		
CW2012A-R39_	390	25	560		1.50				
CW2012A-R47_	470	25	0.1 V / 50 M		100		375	1.76	
CW2012A-R56_	560	23		340		1.90			
CW2012A-R62_	620	23		220		2.00			
CW2012A-R68_	680	23		200		2.15			
CW2012A-R75_	750	20		200		2.25			
CW2012A-R82_	820	20		200		2.50			
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

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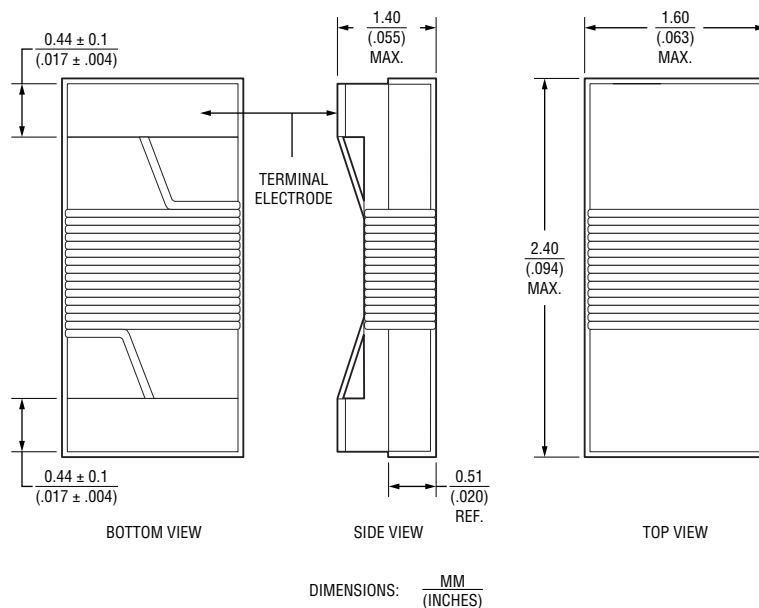


[CONTACT](#)

CWF2012A Series – 0805 Chip Inductors

BOURNS®

Product Dimensions



How to Order

Model **CW2012A - 2N0**

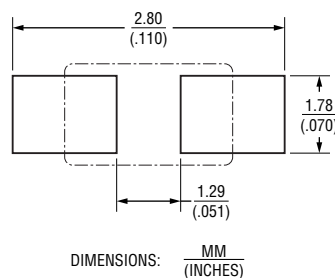
Inductance Value Code _____
(See Table)

Tolerance Code _____

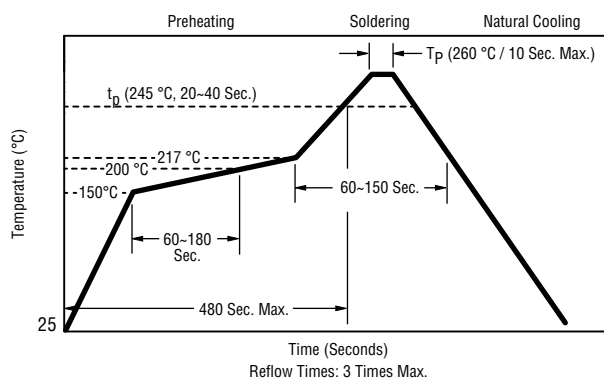
CW2012A-2N0_ ~ CW2012A-4N7_:
B = ± 0.2 nH, D = ± 0.3 nH

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

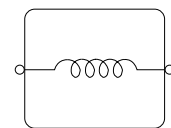
Core Material..... Ceramic

Wire..... Enameled copper

Terminal..... Ag/Ni/Sn

Packaging..... 2,000 pcs. per 7" reel

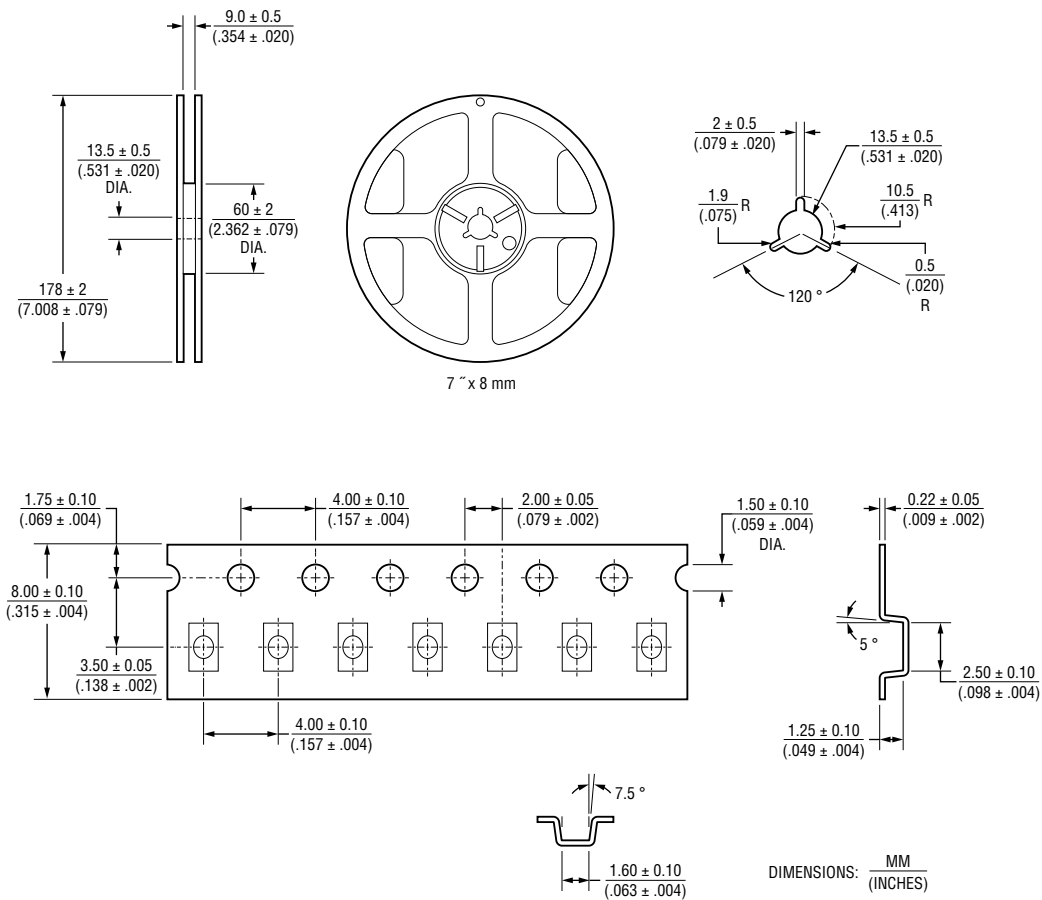
Electrical Schematic



CWF2012A Series – 0805 Chip Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED

QTY: 2,000 PCS. PER REEL

BOURNS®

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

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

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

www.bourns.com

REV. 03/25

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Users should verify actual device performance in their specific applications.

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