Features

- High Q value, self-resonant frequency
- Tight tolerance
- Epoxy cover for mechanical stability and pick & place
- Surface mount
- RoHS compliant*

Applications

- High frequency TV and radio receivers
- Radio transmitters
- RF amplifiers
- Tuning applications

AC4013R Series – Air Coil Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance		Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (mΩ) Max.	Irms (A) Max.
	L (nH)	Tol. (%)					
AC4013R-5N6_	5.6	±2, ±5	100	800	6.5	9	1.6
AC4013R-7N1_	7.15	±2, ±5			6	10	
AC4013R-8N8_	8.8	±2, ±5			6	12	
AC4013R-9N8_	9.85	±2, ±5			5.2	13	
AC4013R-12N_	12.55	±2, ±5			4.6	14	

Note:
Underscore indicates Inductance Tolerance Code:
G = ±2 %, J = ±5 %

Additional Information

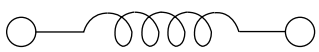
Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

Operating Temperature ..... -25 °C to +125 °C
Storage Temperature ..... -25 °C to +85 °C
Temperature Rise ..... 15 °C
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

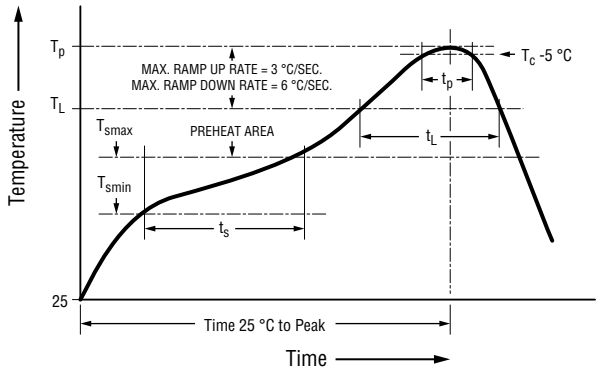
Electrical Schematic



Materials

Wire ..... Enameled Copper
Cover ..... Epoxy
Terminal ..... Sn/Ag/Cu
Packaging ..... 2000 pcs. per 7-inch reel

Soldering Profile



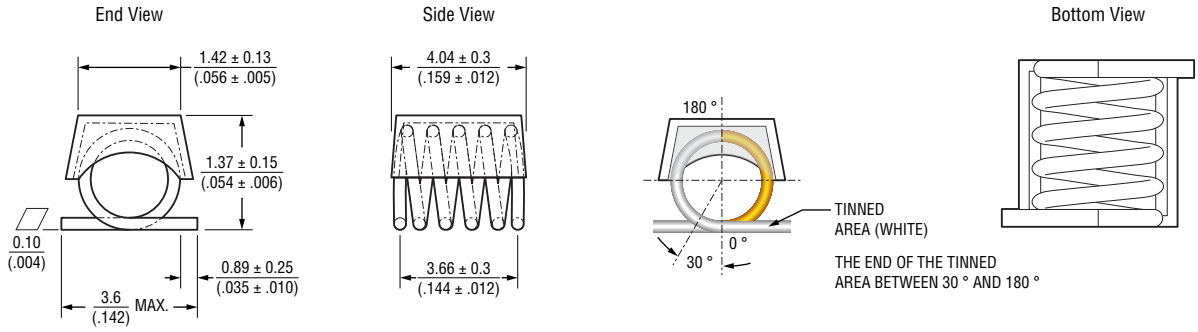
REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time(t_s) from T_{smin} to T_{smax}	 150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	260 °C
Time (t_p) at T_c - 5 °C (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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

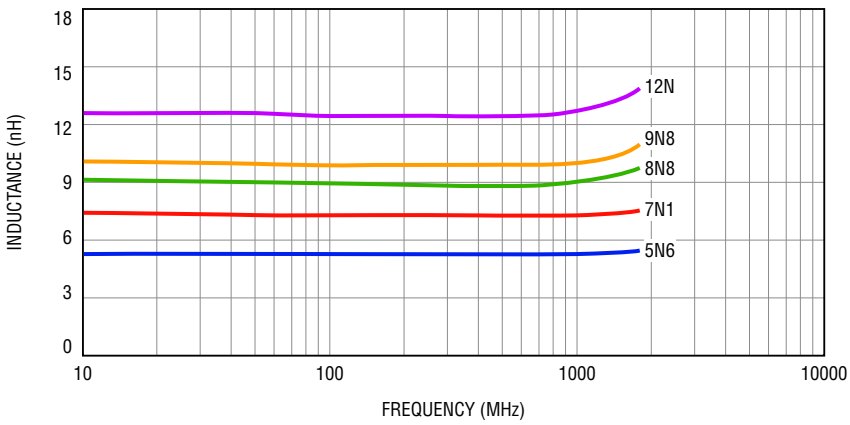
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.

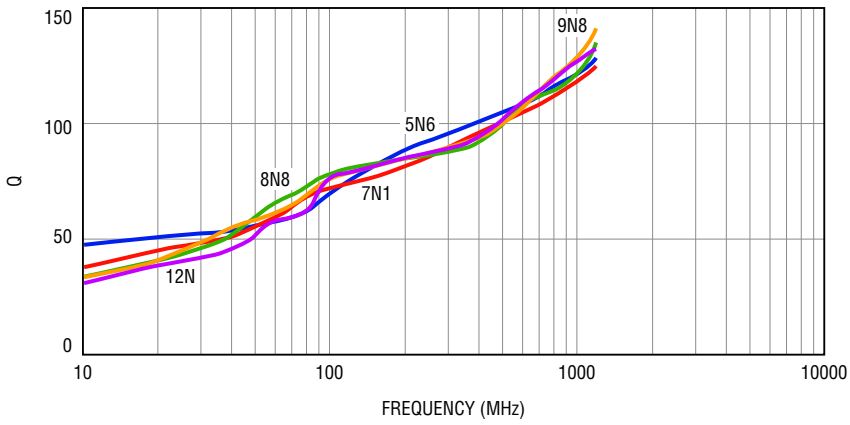
Product Dimensions



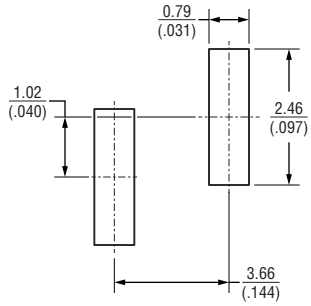
DIMENSIONS: MM / (INCHES)

Inductance vs. IDC





Recommended Layout



DIMENSIONS: MM / (INCHES)

How to Order

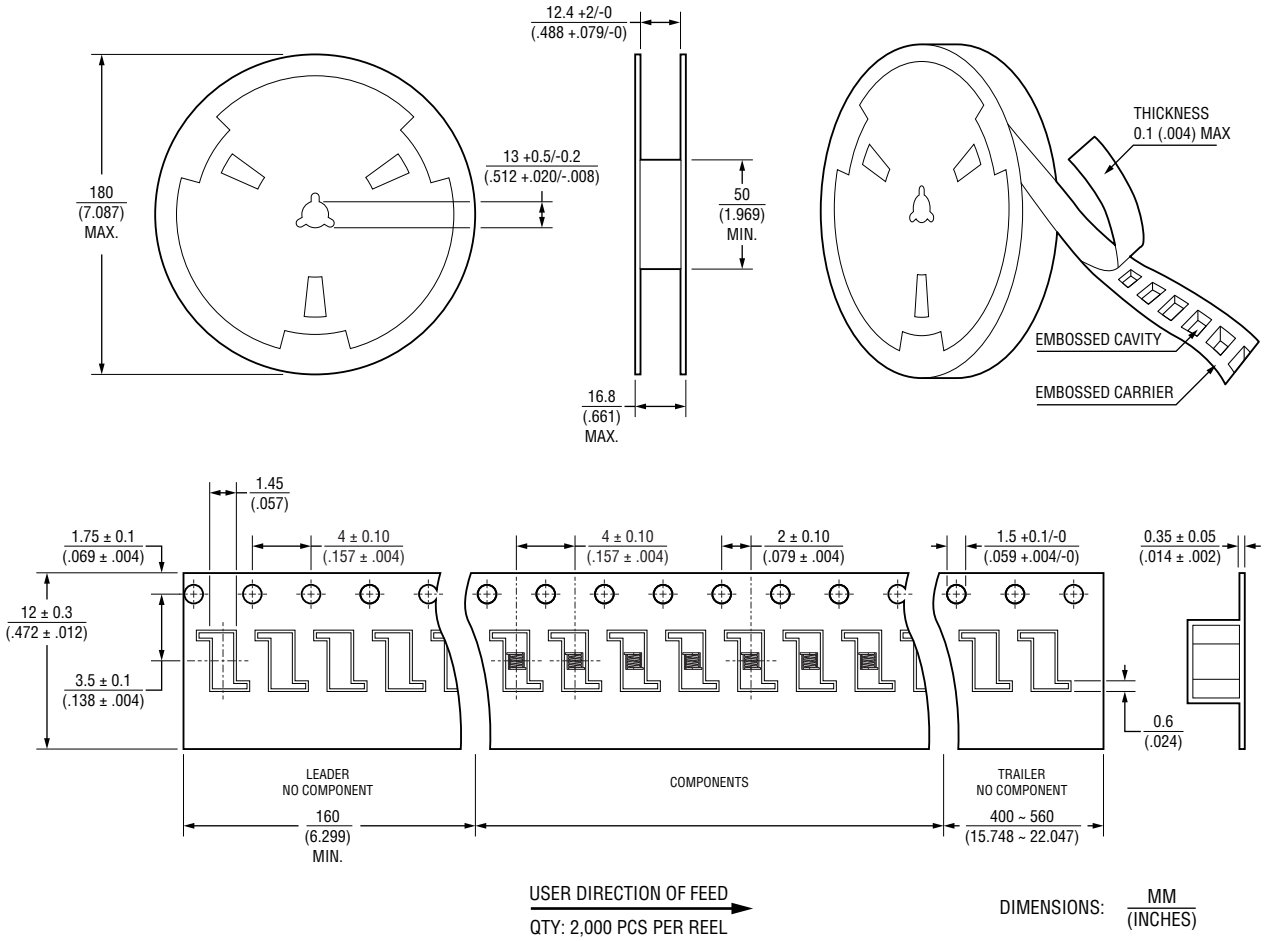
AC4013R - 5N6

Model

Value Code
(See Table)

Tolerance
G = ±2 %
J = ±5 %

Packaging Specifications



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
EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com
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REV. 03/25

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