

# SRN5030HA-470M Datasheet

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DiGi Electronics Part Number SRN5030HA-470M-DG

Manufacturer Bourns Inc.

Manufacturer Product Number SRN5030HA-470M

**Description** IND,5X5X3MM,47UH20%,0.95A,150C,S

Detailed Description 47 µH Semi-Shielded Drum Core, Wirewound Induc

tor 800 mA 450mOhm Max Nonstandard



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# **Purchase and inquiry**

Manufacturer Product Number:	Manufacturer:				
SRN5030HA-470M	Bourns Inc.				
Series:	Product Status:				
SRN5030HA	Active				
Type:	Material - Core:				
Drum Core, Wirewound	Ferrite				
Inductance:	Tolerance:				
47 μΗ	±20%				
Current Rating (Amps):	Current - Saturation (Isat):				
800 mA	950mA				
Shielding:	DC Resistance (DCR):				
Semi-Shielded	450mOhm Max				
Q @ Freq:	Frequency - Self Resonant:				
16 @ 2.52MHz	10MHz				
Ratings:	Operating Temperature:				
AEC-Q200	-55°C ~ 150°C				
Inductance Frequency - Test:	Features:				
100 kHz					
Mounting Type:	Package / Case:				
Surface Mount	Nonstandard				
Supplier Device Package:	Size / Dimension:				
	0.197" L x 0.197" W (5.00mm x 5.00mm)				
Height - Seated (Max):					
0.118" (3.00mm)					

# **Environmental & Export classification**

8504.50.4000

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	



#### **Features**

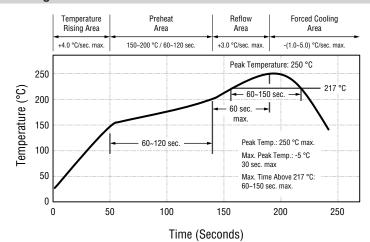
- Semi-shielded construction
- High operating temperature
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRN5030HA Series - Semi-shielded Power Inductors

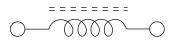
#### Electrical Specifications @ 25 °C

	Induc @ 100 kH	tance Iz / 0.1 V		Q Test Freg.	SRF (MHz)	DCR (mΩ)	Irms (A)	Isat (A)
Bourns Part No.	<b>L (μH)</b>	Tol. %	Q Typ.	(MHz)	Typ.	Max.	Typ.	Typ.
SRN5030HA-R47Y	0.47	30	14.0	7.96	171.0	12.0	7.00	10.00
SRN5030HA-1R0Y	1.00	30	14.0	7.96	124.0	18.0	5.00	7.20
SRN5030HA-1R5Y	1.50	30	13.0	7.96	67.0	26.0	4.20	6.40
SRN5030HA-2R2Y	2.20	30	14.0	7.96	57.0	33.0	3.70	4.90
SRN5030HA-4R7Y	4.70	30	13.0	7.96	39.0	53.0	2.70	3.50
SRN5030HA-100M	10.00	20	18.0	2.52	24.0	105.0	1.70	2.10
SRN5030HA-220M	22.00	20	14.0	2.52	15.0	220.0	1.30	1.40
SRN5030HA-470M	47.00	20	16.0	2.52	10.0	450.0	0.80	0.95
SRN5030HA-101M	100.00	20	30.0	0.796	7.0	1400.0	0.45	0.65

#### **Soldering Profile**



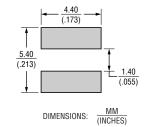
#### **Electrical Schematic**



#### **How to Order**

SRN5030HA - 1R0Y Model -Value Code (see table)

#### **Recommended Layout**





#### **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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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:











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INVENTORY SAMPLES

#### **General Specifications**

Operating Temperature

.....-55 °C to +150 °C (Temperature rise included)

Storage Temperature (Component) .....-55 °C to +150 °C

Temperature Rise .....40 °C at rated Irms

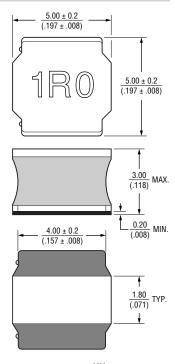
Rated Current ..... Inductance drops 30 % at Isat

Moisture Sensitivity Level.....1 ESD Classification (HBM).....N/A

#### **Materials**

Wire .....Enameled copper Terminal Finish ...... Sn/Ag/Cu Coating ......Magnetic epoxy resin Packaging...... 600 pcs. per 7-inch reel

#### **Product Dimensions**

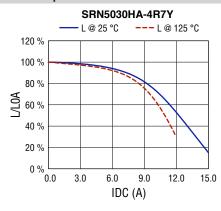


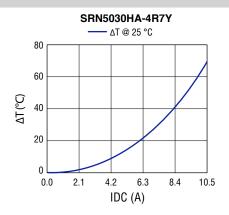
DIMENSIONS: (INCHES)

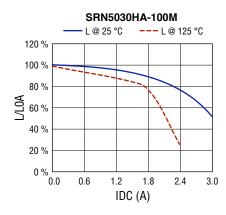
# **SRN5030HA Series - Semi-shielded Power Inductors**

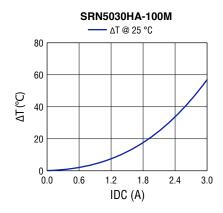
### **BOURNS**

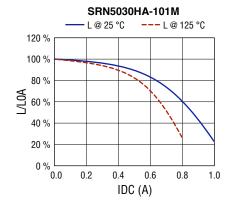
#### Inductance vs. IDC and Temperature Rise vs. IDC

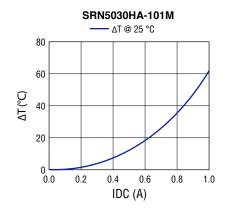








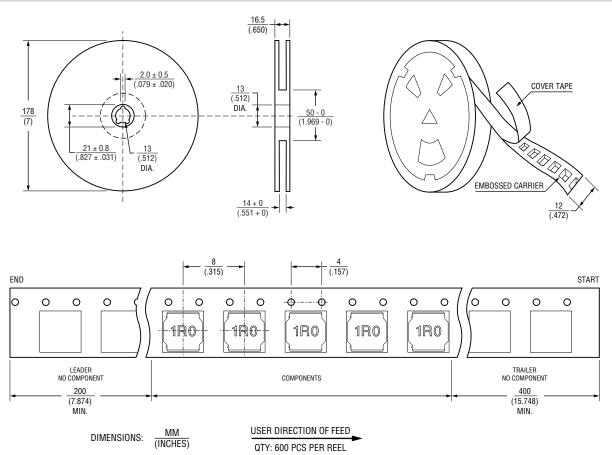




# **SRN5030HA Series - Semi-shielded Power Inductors**

### BOURNS

#### **Packaging Specifications**



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