

### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.47 to 47 µH
- RoHS compliant\* and halogen free\*\*

# SRP1770C Series - Shielded Power Inductors

#### Electrical Specifications @ 25 °C

	Inductance @ 100 kHz / 1 V		Q (Min.)	SRF	DCB	DCB	Irms	Isat	
Bourns Part Number	L (µH)	Tol. (%)	@100 kHz / 1 V	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	(А) Тур.	(А) Тур.	Terminal Type
SRP1770C-R47M	0.47	± 20	10	28	0.75	0.83	60.0	115	
SRP1770C-1R0M	1.0	± 20	20	24	1.30	1.50	48.0	68	
SRP1770C-1R5M	1.5	± 20	20	22	1.80	2.10	42.0	55	
SRP1770C-2R2M	2.2	± 20	20	21	2.50	2.80	40.0	45	
SRP1770C-3R3M	3.3	± 20	20	19	3.50	3.90	28.0	40	
SRP1770C-4R7M	4.7	± 20	20	17	4.80	5.50	26.0	37	
SRP1770C-5R6M	5.6	± 20	20	15	5.90	6.80	24.0	35	Lead
SRP1770C-6R8M	6.8	± 20	20	14	8.40	9.20	22.0	30	Frame
SRP1770C-8R2M	8.2	± 20	20	13	9.60	10.80	18.0	28	
SRP1770C-100M	10.0	± 20	20	12	11.60	13.00	17.0	25	
SRP1770C-150M	15.0	± 20	20	10	16.50	19.50	14.0	23	
SRP1770C-220M	22.0	± 20	20	8	24.00	27.60	12.0	19	
SRP1770C-330M	33.0	± 20	20	6	36.00	42.00	10.7	15	
SRP1770C-470M	47.0	± 20	20	7	46.00	53.00	8.7	13	

### Soldering Profile



WARNING Cancer and Reproductive Harm - <u>www.P65Warnings.ca.gov</u>

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\*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.

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### **General Specifications**

Operating Temperature
40 °C to 125 °C
40 0 10 + 125 0
(Temperature rise included)
Storage Temperature (Component)
-40 °C to +125 °C
Rated Current
Inductance drops 30 % at Isat
Temperature Rise40 °C at rated Irms
Moisture Sensitivity Level1
ESD Classification (HBM)N/A
1 Oliver it designs as many sent DOD traces

<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

Core	Metal alloy powder
Wire	Enameled copper
Terminal Finish	Sn/Ni
Packaging 200	pcs. per 13-inch reel





# **SRP1770C Series - Shielded Power Inductors**

## BOURNS

#### L vs. I Charts







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Users should verify actual device performance in their specific applications.

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# SRP1770C Series - Shielded Power Inductors

## BOURNS

### L vs. I Charts (Continued)



#### **Packaging Specifications**





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Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com www.bourns.com

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