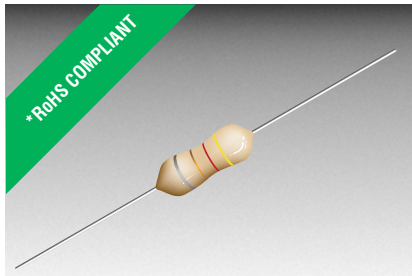




**THE DATASHEET OF
5300-25-RC**





BOURNS®

Features

- Formerly J. W. Miller® model
- Current rating up to 3.3 A
- Inductance range: 1.0 μ H to 1,000 μ H
- RoHS compliant*

Applications

- DC/DC converters
- Power supplies
- General use

5300 Series Conformal Coated RF Choke

Electrical Specifications (@ 25 °C)

Bourns Part No.	Inductance		Test Frequency	SRF (MHz) Min.	DCR (Ω) Max.	Idc (mA)	Isat (mA)
	(μ H)	Tol. (%)					
5300-01-RC	1.0	± 10	7.96 MHz	190	0.018	3300	3000
5300-02-RC	1.2	± 10	7.96 MHz	170	0.019	3200	2700
5300-03-RC	1.5	± 10	7.96 MHz	160	0.020	3100	2500
5300-04-RC	1.8	± 10	7.96 MHz	150	0.023	2900	2100
5300-05-RC	2.2	± 10	7.96 MHz	130	0.031	2600	2000
5300-06-RC	2.7	± 10	7.96 MHz	120	0.033	2500	1900
5300-07-RC	3.3	± 10	7.96 MHz	110	0.054	1900	1700
5300-08-RC	3.9	± 10	7.96 MHz	100	0.060	1800	1500
5300-09-RC	4.7	± 10	7.96 MHz	86	0.068	1700	1400
5300-10-RC	5.6	± 10	7.96 MHz	64	0.074	1600	1300
5300-11-RC	6.8	± 10	7.96 MHz	44	0.080	1600	1200
5300-12-RC	8.2	± 10	7.96 MHz	32	0.087	1500	1100
5300-13-RC	10	± 10	1 KHz	25	0.095	1500	970
5300-14-RC	12	± 10	1 KHz	17	0.11	1400	880
5300-15-RC	15	± 10	1 KHz	13	0.15	1200	790
5300-16-RC	18	± 10	1 KHz	10	0.16	1100	710
5300-17-RC	22	± 10	1 KHz	8.4	0.19	1000	640
5300-18-RC	27	± 10	1 KHz	8.0	0.22	950	580
5300-19-RC	33	± 10	1 KHz	7.6	0.24	910	530
5300-20-RC	39	± 10	1 KHz	7.1	0.26	880	480
5300-21-RC	47	± 10	1 KHz	6.0	0.35	760	430
5300-22-RC	56	± 10	1 KHz	5.8	0.47	650	400
5300-23-RC	68	± 10	1 KHz	4.3	0.53	610	370
5300-24-RC	82	± 10	1 KHz	4.1	0.60	580	330
5300-25-RC	100	± 10	1 KHz	3.9	0.67	550	300
5300-26-RC	120	± 10	1 KHz	3.6	0.90	470	270
5300-27-RC	150	± 10	1 KHz	3.2	1.2	410	250
5300-28-RC	180	± 10	1 KHz	2.8	1.4	380	220
5300-29-RC	220	± 10	1 KHz	2.3	1.9	320	200
5300-30-RC	270	± 10	1 KHz	2.1	2.1	310	180
5300-31-RC	330	± 10	1 KHz	1.9	2.4	290	170
5300-32-RC	390	± 10	1 KHz	1.7	3.0	260	150
5300-33-RC	470	± 10	1 KHz	1.4	3.4	240	140
5300-34-RC	560	± 10	1 KHz	1.3	4.7	210	130
5300-35-RC	680	± 10	1 KHz	1.2	6.4	180	110
5300-36-RC	820	± 10	1 KHz	1.1	7.1	170	100
5300-37-RC	1000	± 10	1 KHz	1.0	7.9	160	95
5300-38-RC	1200	± 10	1 KHz	0.94	9.0	150	87
5300-39-RC	1500	± 10	1 KHz	0.76	12	130	78
5300-40-RC	1800	± 10	1 KHz	0.72	14	120	71
5300-41-RC	2200	± 10	1 KHz	0.64	19	100	64
5300-42-RC	2700	± 10	1 KHz	0.56	25	90	58
5300-43-RC	3300	± 10	1 KHz	0.53	29	83	52
5300-44-RC	3900	± 10	1 KHz	0.48	34	77	48
5300-45-RC	4700	± 10	1 KHz	0.45	37	74	44
5300-46-RC	5600	± 10	1 KHz	0.40	50	63	40
5300-47-RC	6800	± 10	1 KHz	0.36	58	59	36
5300-48-RC	8200	± 10	1 KHz	0.29	68	54	33
5300-49-RC	10,000	± 10	1 KHz	0.27	75	52	30

General Specifications

Temperature Rise 35 °C at Idc Rated Current
 Inductance drop 5 % typical at Isat
 Operating Temperature -55 °C to +105 °C
 Storage Temperature -55 °C to +105 °C
 Dielectric Strength 500 Vrms

Materials

Core Ferrite
 Wire Enameled copper
 Terminal Coating Sn
 Coating Epoxy resin
 Packaging
 Standard 500 pcs. per bag
 Optional 3000 pcs. per 14-inch reel

How to Order

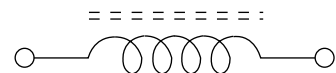
5300 - 02 - - - RC

Model _____
 Value Code _____
 (See table)
 Packaging Code _____
 Blank = 500 pcs./bag
 TR = 3000 pcs./14-inch reel
 Compliance Code _____
 RC = RoHS compliant*

Examples:

- 5300-02-RC = 1.2 mH packaged 500 pcs./bag.
- 5300-16-TR-RC = 18 mH packaged 3000 pcs./14-inch reel.

Electrical Schematic



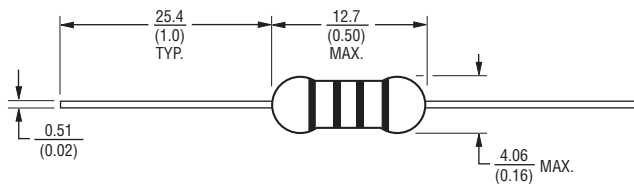
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

5300 Series Conformal Coated RF Choke



Product Dimensions

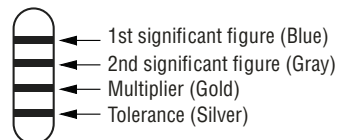


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

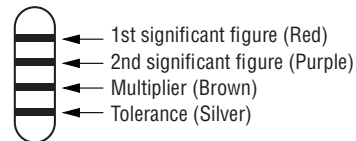
Typical Part Marking - EIA Color Code

Color	1st & 2nd Significant Figure	Multiplier	Tolerance
Silver		0.01	±10 %
Gold		0.1	±5 %
Black	0	1	
Brown	1	10	
Red	2	100	
Orange	3	1000	
Yellow	4		
Green	5		
Blue	6		
Violet	7		
Gray	8		
White	9		

Example for 6.8 μH , ±10 %



Example for 270 μH , ±10 %



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REV. 10/09

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Users should verify actual device performance in their specific applications.

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