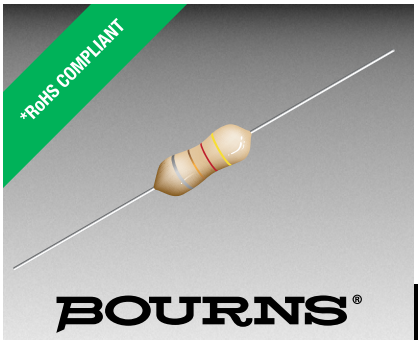


Features

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

Applications

- DC/DC converters
- Power supplies
- General use

5300 Series Conformal Coated RF Choke

Electrical Specifications (@ 25 °C)

Bourns Part No.	Inductance (µH)	Inductance Tol. (%)	Test Frequency	SRF (MHz) Min.	DCR (Ω) Max.	Idc (mA)	Isat (mA)
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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

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)

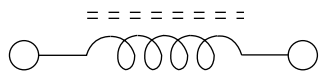
Packaging Code
Blank = 500 pcs./bag
TR = 3000 pcs./14-inch reel

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

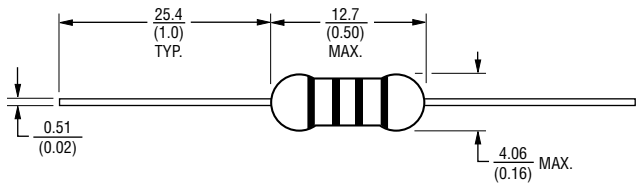


WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

5300 Series Conformal Coated RF Choke

BOURNS®

Product Dimensions



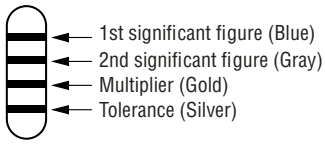
DIMENSIONS: MM / (INCHES)

NOTE: The wire diameter used on these products is from 0.025 to 0.21 mm. Due to the inductor wire termination being made on the connection pin, careful handling during assembly is required to ensure that the lead is not subjected to any stress close to the termination point. If bending/shaping of the pin is required, maintain stability and avoid excessive or abrupt forces to keep the parts centered and the leads secure on both sides. The bend radius should be located several millimeters away from the wire termination point to ensure that it is not stressed, with possible stretching or snapping occurring.

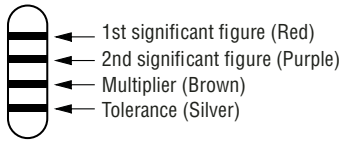
Typical Part Marking - EIA Color Code

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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