

## Features

- Formerly J. W. Miller® model
- High Q value
- Inductance range: 0.15  $\mu$ H to 33  $\mu$ H
- RoHS compliant\*



This series is currently available but not recommended for new designs.

## Applications

- Filters
- Output chokes

# 9310 Series Molded Axial Inductor

## Electrical Specifications

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR ( $\Omega$ ) Max.	Idc (mA)
	( $\mu$ H)	Tol. (%)					
9310-00-RC	0.15	$\pm 20$	50	25	525	0.030	2450
9310-02-RC	0.22	$\pm 20$	50	25	450	0.055	1900
9310-04-RC	0.33	$\pm 20$	45	25	360	0.090	1400
9310-06-RC	0.47	$\pm 20$	45	25	310	0.120	1225
9310-07-RC	0.56	$\pm 10$	50	25	280	0.135	1220
9310-08-RC	0.68	$\pm 10$	50	25	250	0.15	1100
9310-10-RC	0.82	$\pm 10$	50	25	220	0.22	900
9310-12-RC	1.0	$\pm 10$	50	25	200	0.29	830
9310-14-RC	1.2	$\pm 10$	33	7.9	180	0.42	650
9310-16-RC	1.5	$\pm 10$	33	7.9	160	0.50	600
9310-18-RC	1.8	$\pm 10$	33	7.9	150	0.65	525
9310-20-RC	2.2	$\pm 10$	33	7.9	135	0.95	435
9310-22-RC	2.7	$\pm 10$	33	7.9	120	1.20	385
9310-24-RC	3.3	$\pm 10$	33	7.9	110	2.00	300
9310-26-RC	3.9	$\pm 10$	33	7.9	100	2.30	280
9310-28-RC	4.7	$\pm 10$	33	7.9	90	2.60	260
9310-30-RC	5.6	$\pm 10$	45	7.9	60	0.32	750
9310-32-RC	6.8	$\pm 10$	50	7.9	55	0.50	600
9310-34-RC	8.2	$\pm 10$	50	7.9	50	0.60	545
9310-36-RC	10	$\pm 10$	55	7.9	45	0.90	445
9310-38-RC	12	$\pm 10$	65	2.5	42	1.1	404
9310-40-RC	15	$\pm 10$	65	2.5	40	1.4	370
9310-42-RC	18	$\pm 10$	75	2.5	34	2.3	280
9310-44-RC	22	$\pm 10$	75	2.5	30	2.5	265
9310-46-RC	24	$\pm 10$	60	2.5	26	2.5	265
9310-48-RC	27	$\pm 10$	60	2.5	25	2.6	260
9310-50-RC	30	$\pm 10$	65	2.5	19	2.8	255
9310-52-RC	33	$\pm 10$	65	2.5	19	3.0	250

## General Specifications

Temperature Rise ..... 35 °C at I<sub>dc</sub>  
 Operating Temperature ..... -55 °C to +105 °C  
 Storage Temperature ..... -55 °C to +105 °C  
 Dielectric Strength ..... 1000 V<sub>rms</sub>

## Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Coating ..... Sn  
 Packaging  
 Standard ..... 1000 pcs. per bag  
 Optional ..... 1000 pcs. per 14-inch reel

## How to Order

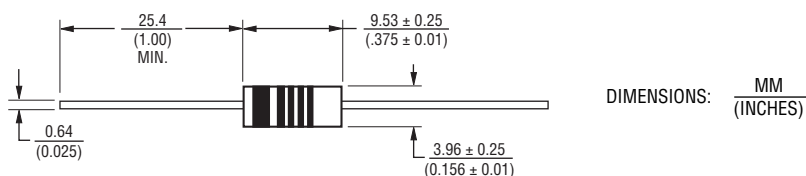
**9310 - 02 - - RC**

Model \_\_\_\_\_  
 Value Code \_\_\_\_\_  
 Two-digit code from table  
 (Example: -02 = 0.22  $\mu$ H)  
 Packaging Code \_\_\_\_\_  
 Blank = 1000 pcs./bag  
 TR = 1000 pcs./14-inch reel  
 Compliance Code \_\_\_\_\_  
 RC = RoHS compliant\*

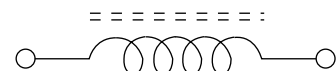
### Examples:

- 9310-00-RC = 0.15  $\mu$ H packaged 1000 pcs./bag.
- 9310-18-TR-RC = 1.8  $\mu$ H packaged 1000 pcs./14-inch reel.

## Product Dimensions



## Electrical Schematic



\*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.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

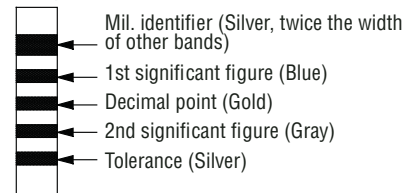
# 9310 Series Molded Axial Inductor

**BOURNS®**

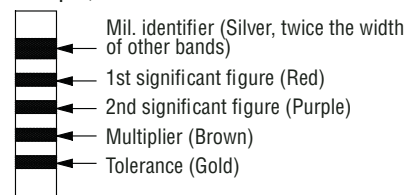
## Typical Part Marking - MIL-STD Color Code

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

Example for L value less than 10  $\mu\text{H}$   
6.8  $\mu\text{H}$ , ±10 %



Example for L value 10  $\mu\text{H}$  and higher  
270  $\mu\text{H}$ , ±5 %



REV. 01/15