

**BOURNS®**

## Features

- Formerly J. W. Miller® model
- High Q value
- Inductance range: 0.1  $\mu$ H to 1000  $\mu$ H
- RoHS compliant\*

## Applications

- Filters
- Output chokes

# 9230 Series Molded Axial Inductor

### Electrical Specifications

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR ( $\Omega$ ) Max.	Idc (mA)	Core Material
	( $\mu$ H)	Tol. (%)						
9230-94-RC	0.10	$\pm 10$	40	25	690	0.07	1100	Phenolic
9230-96-RC	0.12	$\pm 10$	40	25	650	0.08	1100	Phenolic
9230-00-RC	0.15	$\pm 10$	38	25	600	0.10	1100	Phenolic
9230-02-RC	0.18	$\pm 10$	35	25	550	0.12	1010	Phenolic
9230-04-RC	0.22	$\pm 10$	33	25	510	0.14	935	Phenolic
9230-06-RC	0.27	$\pm 10$	33	25	430	0.16	875	Phenolic
9230-08-RC	0.33	$\pm 10$	30	25	410	0.20	780	Phenolic
9230-10-RC	0.39	$\pm 10$	30	25	380	0.30	640	Phenolic
9230-12-RC	0.47	$\pm 10$	30	25	340	0.35	590	Phenolic
9230-14-RC	0.56	$\pm 10$	30	25	300	0.50	495	Phenolic
9230-16-RC	0.68	$\pm 10$	28	25	275	0.60	450	Phenolic
9230-18-RC	0.82	$\pm 10$	28	25	250	0.85	380	Phenolic
9230-20-RC	1.0	$\pm 10$	25	25	230	1.00	350	Phenolic
9230-22-RC	1.2	$\pm 10$	25	7.9	150	0.18	825	Ferrite
9230-24-RC	1.5	$\pm 10$	28	7.9	140	0.22	745	Ferrite
9230-26-RC	1.8	$\pm 10$	30	7.9	125	0.30	640	Ferrite
9230-28-RC	2.2	$\pm 10$	30	7.9	115	0.40	550	Ferrite
9230-30-RC	2.7	$\pm 10$	37	7.9	100	0.50	495	Ferrite
9230-32-RC	3.3	$\pm 10$	45	7.9	90	0.85	380	Ferrite
9230-34-RC	3.9	$\pm 10$	45	7.9	82	1.0	350	Ferrite
9230-36-RC	4.7	$\pm 10$	45	7.9	75	1.2	320	Ferrite
9230-38-RC	5.6	$\pm 10$	50	7.9	68	1.8	260	Ferrite
9230-40-RC	6.8	$\pm 10$	50	7.9	60	2.0	245	Ferrite
9230-42-RC	8.2	$\pm 10$	55	7.9	55	2.7	210	Ferrite
9230-44-RC	10	$\pm 10$	55	7.9	50	3.7	180	Ferrite
9230-46-RC	12	$\pm 10$	45	2.5	40	2.7	210	Ferrite
9230-48-RC	15	$\pm 10$	45	2.5	35	2.8	205	Ferrite
9230-50-RC	18	$\pm 10$	50	2.5	32	3.1	195	Ferrite
9230-52-RC	22	$\pm 10$	50	2.5	25	3.3	190	Ferrite
9230-54-RC	27	$\pm 10$	50	2.5	22	3.5	185	Ferrite
9230-56-RC	33	$\pm 10$	45	2.5	24	3.4	187	Ferrite
9230-58-RC	39	$\pm 10$	45	2.5	22	3.6	180	Ferrite
9230-60-RC	47	$\pm 10$	45	2.5	20	4.5	165	Ferrite
9230-62-RC	56	$\pm 10$	45	2.5	18	5.7	145	Ferrite
9230-64-RC	68	$\pm 10$	50	2.5	15	6.7	135	Ferrite
9230-66-RC	82	$\pm 10$	50	2.5	14	7.3	130	Ferrite
9230-68-RC	100	$\pm 10$	50	2.5	13	8.0	125	Ferrite
9230-70-RC	120	$\pm 10$	30	0.79	12	13	97	Ferrite
9230-72-RC	150	$\pm 10$	30	0.79	11	15	85	Ferrite
9230-74-RC	180	$\pm 10$	30	0.79	10	17	79	Ferrite
9230-76-RC	220	$\pm 10$	30	0.79	9	21	73	Ferrite
9230-78-RC	270	$\pm 10$	30	0.79	8	25	65	Ferrite
9230-80-RC	330	$\pm 10$	30	0.79	7	28	62	Ferrite
9230-82-RC	390	$\pm 10$	30	0.79	6.5	35	55	Ferrite
9230-84-RC	470	$\pm 10$	30	0.79	6	42	50	Ferrite
9230-86-RC	560	$\pm 10$	30	0.79	5	46	48	Ferrite
9230-88-RC	680	$\pm 10$	30	0.79	4.2	60	42	Ferrite
9230-90-RC	820	$\pm 10$	30	0.79	3.8	65	40	Ferrite
9230-92-RC	1000	$\pm 10$	30	0.79	3.4	72	38	Ferrite

### General Specifications

Temperature Rise ..... 35 °C at Idc  
 Operating Temperature  
 Ferrite ..... -55 °C to +125 °C  
 Phenolic ..... -55 °C to +105 °C  
 Storage Temperature  
 Ferrite ..... -55 °C to +125 °C  
 Phenolic ..... -55 °C to +105 °C  
 Dielectric Strength ..... 1000 Vrms

### Materials

Core ..... Phenolic or Ferrite  
 Wire ..... Enameled copper  
 Terminal Coating ..... Sn  
 Packaging  
 Standard ..... 1000 pcs. per bag  
 Optional ..... 5000 pcs. per 14-inch reel

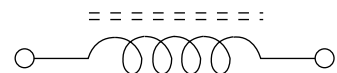
### How to Order

**9230 - 02 - - RC**

Model \_\_\_\_\_  
 Value Code \_\_\_\_\_  
 Two-digit code from table  
 (Example: -02 = 0.18  $\mu$ H)  
 Packaging Code \_\_\_\_\_  
 Blank = 1000 pcs./bag  
 TR = 5000 pcs./14-inch reel  
 Compliance Code \_\_\_\_\_  
 RC = RoHS compliant\*

- Examples:
- 9230-00-RC = 0.15  $\mu$ H packaged 1000 pcs./bag.
  - 9230-16-TR-RC = 0.68  $\mu$ H packaged 5000 pcs./14-inch reel.

### Electrical Schematic



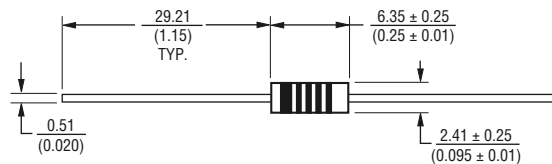
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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](http://www.bourns.com/docs/legal/disclaimer.pdf).

# 9230 Series Molded Axial Inductor

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## Product Dimensions

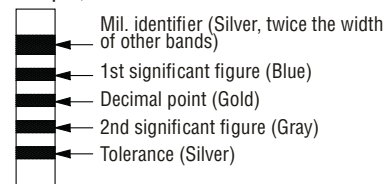


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

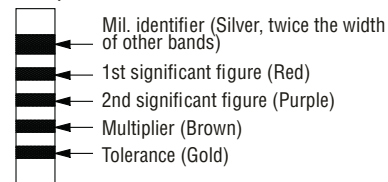
## Typical Part Marking - MIL-STD Color Code

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 %



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REV. 10/11

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Users should verify actual device performance in their specific applications.

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