

**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

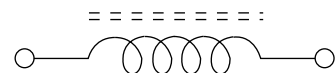
### How to Order

**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



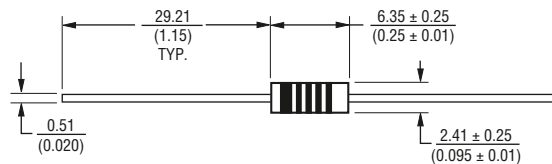
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# 9230 Series Molded Axial Inductor

**BOURNS®**

## Product Dimensions

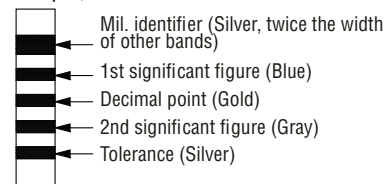


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

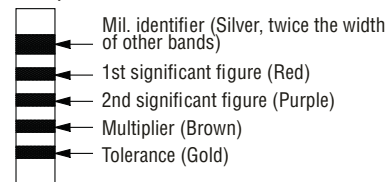
## Typical Part Marking - MIL-STD Color Code

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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