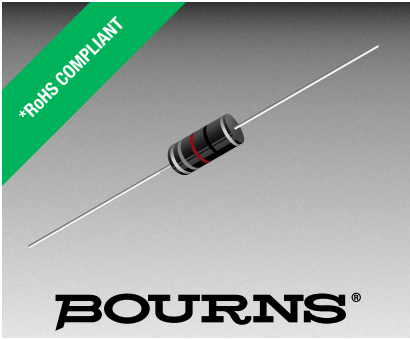




**THE DATASHEET OF**  
**9230-28-RC**





## 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)	ToI. (%)						
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

### Additional Information

Click these links for more information:



### 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

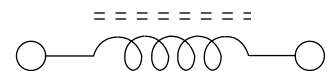
### How to Order

**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



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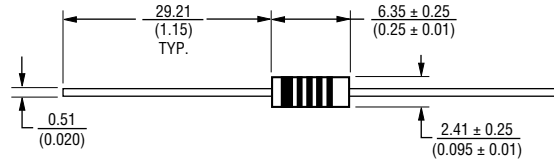


**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# 9230 Series – Molded Axial Inductor

**BOURNS®**

## Product Dimensions



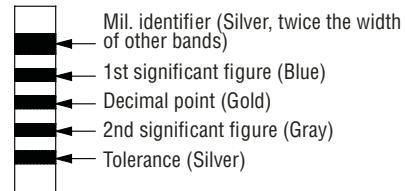
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

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.

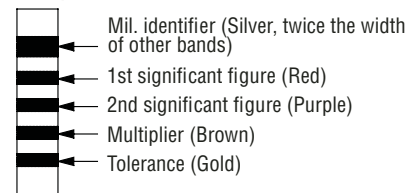
## Typical Part Marking - MIL-STD Color Code

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. 03/25

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Users should verify actual device performance in their specific applications.

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