

## Features

- Formerly *J.W. Miller* model
- Shielded
- High Q value
- Inductance range: 0.1  $\mu\text{H}$  to 100,000  $\mu\text{H}$
- RoHS compliant\*

## Applications

- Filters
- Output chokes

# 9250A Series Molded Axial Inductor

### Electrical Specifications

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR $\Omega$ Max.	Idc (mA)	Isat (mA)
	( $\mu\text{H}$ )	Tol. (%)						
9250A-101-RC	0.10	$\pm 10$	50	25	250	0.025	1790	1790
9250A-121-RC	0.12	$\pm 10$	51	25	250	0.034	1530	1530
9250A-151-RC	0.15	$\pm 10$	51	25	250	0.037	1470	1470
9250A-181-RC	0.18	$\pm 10$	50	25	250	0.047	1300	1300
9250A-221-RC	0.22	$\pm 10$	49	25	250	0.067	1100	1100
9250A-271-RC	0.27	$\pm 10$	47	25	250	0.11	855	855
9250A-331-RC	0.33	$\pm 10$	46	25	250	0.13	780	780
9250A-391-RC	0.39	$\pm 10$	44	25	250	0.18	670	670
9250A-471-RC	0.47	$\pm 10$	44	25	235	0.25	565	565
9250A-561-RC	0.56	$\pm 10$	43	25	210	0.33	490	490
9250A-681-RC	0.68	$\pm 10$	42	25	190	0.45	420	420
9250A-821-RC	0.82	$\pm 10$	50	25	180	0.59	370	370
9250A-102-RC	1.0	$\pm 10$	40	25	140	0.07	1070	1070
9250A-122-RC	1.2	$\pm 10$	44	7.9	130	0.10	895	895
9250A-152-RC	1.5	$\pm 10$	44	7.9	115	0.12	815	815
9250A-182-RC	1.8	$\pm 10$	44	7.9	105	0.14	775	775
9250A-222-RC	2.2	$\pm 10$	44	7.9	100	0.19	650	650
9250A-272-RC	2.7	$\pm 10$	44	7.9	92	0.28	535	535
9250A-332-RC	3.3	$\pm 10$	44	7.9	85	0.35	480	480
9250A-392-RC	3.9	$\pm 10$	44	7.9	75	0.40	450	450
9250A-472-RC	4.7	$\pm 10$	44	7.9	70	0.55	380	380
9250A-562-RC	5.6	$\pm 10$	44	7.9	65	0.72	335	335
9250A-682-RC	6.8	$\pm 10$	50	7.9	55	1.02	280	280
9250A-822-RC	8.2	$\pm 10$	50	7.9	50	1.32	250	250
9250A-103-RC	10	$\pm 10$	50	7.9	46	1.62	220	220
9250A-123-RC	12	$\pm 10$	55	2.5	44	2.00	200	200
9250A-153-RC	15	$\pm 10$	45	2.5	49	0.80	315	250
9250A-183-RC	18	$\pm 10$	45	2.5	45	0.89	300	235
9250A-223-RC	22	$\pm 10$	45	2.5	41	0.96	290	220
9250A-273-RC	27	$\pm 10$	45	2.5	38	1.19	260	200
9250A-333-RC	33	$\pm 10$	45	2.5	34	1.37	240	190
9250A-393-RC	39	$\pm 10$	50	2.5	29	1.93	205	180
9250A-473-RC	47	$\pm 10$	50	2.5	27	2.11	195	175
9250A-563-RC	56	$\pm 10$	50	2.5	25	2.23	190	160
9250A-683-RC	68	$\pm 10$	50	2.5	21	2.70	170	150
9250A-823-RC	82	$\pm 10$	50	2.5	10.5	2.44	180	140
9250A-104-RC	100	$\pm 10$	50	2.5	10	3.12	160	120
9250A-124-RC	120	$\pm 10$	55	0.79	9.7	3.6	150	95
9250A-154-RC	150	$\pm 10$	55	0.79	8.5	4.1	140	90
9250A-184-RC	180	$\pm 10$	55	0.79	8.0	4.4	135	85
9250A-224-RC	220	$\pm 10$	55	0.79	7.5	5.0	125	80
9250A-274-RC	270	$\pm 10$	55	0.79	7.0	5.8	115	70
9250A-334-RC	330	$\pm 10$	55	0.79	6.5	6.4	110	65
9250A-394-RC	390	$\pm 10$	60	0.79	6.2	7.4	105	60
9250A-474-RC	470	$\pm 10$	60	0.79	5.7	9.5	92	58
9250A-564-RC	560	$\pm 10$	60	0.79	4.7	10.5	90	55
9250A-684-RC	680	$\pm 10$	60	0.79	4.5	11.8	80	50
9250A-824-RC	820	$\pm 10$	60	0.79	4.2	13.0	80	45

Electrical specifications continued on page 2.

### General Specifications

Temperature Rise .....35 °C at Idc  
 Rated Current  
 .....Inductance drop 5 % typical at Isat  
 Operating Temperature ...-55 °C to +125 °C  
 Storage Temperature.....-55 °C to +125 °C  
 Dielectric Strength.....1000 Vrms

### 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

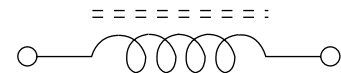
**9250A - 102 - - - RC**

Model \_\_\_\_\_  
 Value Code \_\_\_\_\_  
 (See table)  
 Packaging Code \_\_\_\_\_  
 Blank = 1000 pcs./bag  
 TR = 1000 pcs./14-inch reel  
 Compliance Code \_\_\_\_\_  
 RC = RoHS compliant\*

### Examples:

- 9250A-151-RC = 0.15  $\mu\text{H}$  packaged 1000 pcs./bag.
- 9250A-681-TR-RC = 0.68  $\mu\text{H}$  packaged 1000 pcs./14-inch reel.

### Electrical Schematic



\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

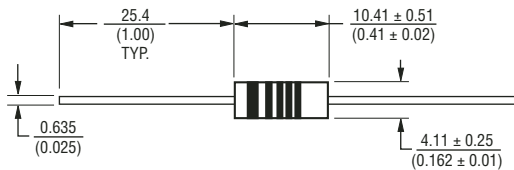
# 9250A Series Molded Axial Inductor

**BOURNS®**

## Electrical Specifications (Continued)

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR $\Omega$ Max.	Idc (mA)	Isat (mA)
	( $\mu$ H)	Tol. (%)						
9250A-105-RC	1000	$\pm 10$	60	0.79	3.8	17.5	70	40
9250A-125-RC	1200	$\pm 10$	45	0.25	1.5	22.1	60	35
9250A-155-RC	1500	$\pm 10$	45	0.25	1.2	26.5	55	33
9250A-185-RC	1800	$\pm 10$	45	0.25	1.0	29.9	50	30
9250A-225-RC	2200	$\pm 10$	45	0.25	0.97	33.8	50	27
9250A-275-RC	2700	$\pm 10$	45	0.25	0.92	47.3	40	25
9250A-335-RC	3300	$\pm 10$	45	0.25	0.84	53.0	40	22
9250A-395-RC	3900	$\pm 10$	45	0.25	0.8	73.8	35	20
9250A-475-RC	4700	$\pm 10$	45	0.25	0.74	81.6	31	19
9250A-565-RC	5600	$\pm 10$	44	0.25	0.73	98.9	28	17
9250A-685-RC	6800	$\pm 10$	40	0.25	0.66	111	27	16
9250A-825-RC	8200	$\pm 10$	40	0.25	0.54	119	26	15
9250A-106-RC	10,000	$\pm 10$	40	0.25	0.47	137	24	14
9250A-126-RC	12,000	$\pm 10$	30	0.079	0.33	143	23	13
9250A-156-RC	15,000	$\pm 10$	30	0.079	0.29	157	22	12
9250A-186-RC	18,000	$\pm 10$	30	0.079	0.28	175	21	10
9250A-226-RC	22,000	$\pm 10$	27	0.079	0.25	274	17	9
9250A-276-RC	27,000	$\pm 10$	27	0.079	0.21	308	16	8
9250A-336-RC	33,000	$\pm 10$	27	0.079	0.19	343	15	7.5
9250A-396-RC	39,000	$\pm 10$	27	0.079	0.17	376	15	6
9250A-476-RC	47,000	$\pm 10$	23	0.079	0.16	473	13	5.5
9250A-566-RC	56,000	$\pm 10$	23	0.079	0.14	512	13	5
9250A-686-RC	68,000	$\pm 10$	23	0.079	0.13	580	12	4
9250A-826-RC	82,000	$\pm 10$	21	0.079	0.12	618	11	3.5
9250A-107-RC	100,000	$\pm 10$	18	0.079	0.11	678	11	3

## Product Dimensions

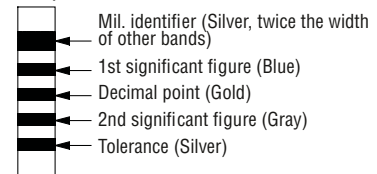


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

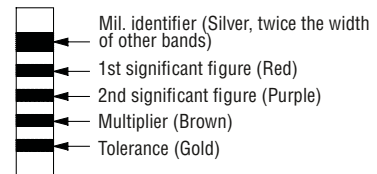
## Typ. Part Marking - MIL-STD Color Code

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			$\pm 10\%$
Gold	Decimal Point		$\pm 5\%$

Example for L value less than 10  $\mu$ H  
6.8  $\mu$ H,  $\pm 10\%$



Example for L value 10  $\mu$ H and higher  
270  $\mu$ H,  $\pm 5\%$



REV. 04/08

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Customers should verify actual device performance in their specific applications.