

**BOURNS®**

## Features

- Formerly J. W. Miller® model
- Current rating up to 1.1 A
- Inductance range: 1.0  $\mu$ H to 1,000  $\mu$ H
- RoHS compliant\*

## Applications

- DC/DC converters
- Power supplies
- General use

# 8230 Series Conformal Coated RF Choke

### Electrical Specifications (@ 25 °C)

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR ( $\Omega$ ) Max.	Idc (mA)	Core Material
	( $\mu$ H)	Tol. (%)						
8230-94-RC	0.10	$\pm 10$	40	25	690	0.07	1100	Phenolic
8230-96-RC	0.12	$\pm 10$	40	25	650	0.08	1100	Phenolic
8230-00-RC	0.15	$\pm 10$	38	25	600	0.10	1100	Phenolic
8230-02-RC	0.18	$\pm 10$	35	25	550	0.12	1010	Phenolic
8230-04-RC	0.22	$\pm 10$	33	25	510	0.14	935	Phenolic
8230-06-RC	0.27	$\pm 10$	33	25	430	0.16	875	Phenolic
8230-08-RC	0.33	$\pm 10$	30	25	410	0.20	780	Phenolic
8230-10-RC	0.39	$\pm 10$	30	25	380	0.30	640	Phenolic
8230-12-RC	0.47	$\pm 10$	30	25	340	0.35	590	Phenolic
8230-14-RC	0.56	$\pm 10$	30	25	300	0.50	495	Phenolic
8230-16-RC	0.68	$\pm 10$	28	25	275	0.60	450	Phenolic
8230-18-RC	0.82	$\pm 10$	28	25	250	0.85	380	Phenolic
8230-20-RC	1.0	$\pm 10$	25	25	230	1.00	350	Phenolic
8230-22-RC	1.2	$\pm 10$	25	7.9	150	0.18	825	Ferrite
8230-24-RC	1.5	$\pm 10$	28	7.9	140	0.22	745	Ferrite
8230-26-RC	1.8	$\pm 10$	30	7.9	125	0.30	640	Ferrite
8230-28-RC	2.2	$\pm 10$	30	7.9	115	0.40	550	Ferrite
8230-30-RC	2.7	$\pm 10$	37	7.9	100	0.50	495	Ferrite
8230-32-RC	3.3	$\pm 10$	45	7.9	90	0.85	380	Ferrite
8230-34-RC	3.9	$\pm 10$	45	7.9	82	1.0	350	Ferrite
8230-36-RC	4.7	$\pm 10$	45	7.9	75	1.2	320	Ferrite
8230-38-RC	5.6	$\pm 10$	50	7.9	68	1.8	260	Ferrite
8230-40-RC	6.8	$\pm 10$	50	7.9	60	2.0	245	Ferrite
8230-42-RC	8.2	$\pm 10$	55	7.9	55	2.7	210	Ferrite
8230-44-RC	10	$\pm 10$	55	7.9	50	3.7	180	Ferrite
8230-46-RC	12	$\pm 10$	45	2.5	40	2.7	210	Ferrite
8230-48-RC	15	$\pm 10$	45	2.5	35	2.8	205	Ferrite
8230-50-RC	18	$\pm 10$	50	2.5	32	3.1	195	Ferrite
8230-52-RC	22	$\pm 10$	50	2.5	25	3.3	190	Ferrite
8230-54-RC	27	$\pm 10$	50	2.5	22	3.5	185	Ferrite
8230-56-RC	33	$\pm 10$	45	2.5	24	3.4	187	Ferrite
8230-58-RC	39	$\pm 10$	45	2.5	22	3.6	180	Ferrite
8230-60-RC	47	$\pm 10$	45	2.5	20	4.5	165	Ferrite
8230-62-RC	56	$\pm 10$	45	2.5	18	5.7	145	Ferrite
8230-64-RC	68	$\pm 10$	50	2.5	15	6.7	135	Ferrite
8230-66-RC	82	$\pm 10$	50	2.5	14	7.3	130	Ferrite
8230-68-RC	100	$\pm 10$	50	2.5	13	8.0	125	Ferrite
8230-70-RC	120	$\pm 10$	30	0.79	12	13	97	Ferrite
8230-72-RC	150	$\pm 10$	30	0.79	11	15	85	Ferrite
8230-74-RC	180	$\pm 10$	30	0.79	10	17	79	Ferrite
8230-76-RC	220	$\pm 10$	30	0.79	9.0	21	73	Ferrite
8230-78-RC	270	$\pm 10$	30	0.79	8.0	25	65	Ferrite
8230-80-RC	330	$\pm 10$	30	0.79	4.0	28	62	Ferrite
8230-82-RC	390	$\pm 10$	30	0.79	6.6	35	55	Ferrite
8230-84-RC	470	$\pm 10$	30	0.79	6.0	42	50	Ferrite
8230-86-RC	560	$\pm 10$	30	0.79	5.0	46	48	Ferrite
8230-88-RC	680	$\pm 10$	30	0.79	4.2	60	42	Ferrite
8230-90-RC	820	$\pm 10$	30	0.79	3.8	65	40	Ferrite
8230-92-RC	1,000	$\pm 10$	30	0.79	3.4	72	38	Ferrite

### General Specifications

Temperature Rise ..... 35 °C at Idc  
 Operating Temperature ..... -55 °C to +105 °C  
 Storage Temperature ..... -55 °C to +105 °C  
 Dielectric Strength ..... 500 Vrms

### Materials

Core ..... See value table  
 Wire ..... Enameled copper  
 Terminal Coating ..... Sn  
 Coating ..... Epoxy resin  
 Packaging  
 Standard ..... 1000 pcs. per bag  
 Optional ..... 5000 pcs. per 14-inch reel

### How to Order

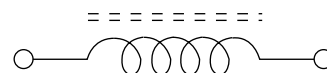
**8230 - 22 - - RC**

Model \_\_\_\_\_  
 Value Code \_\_\_\_\_  
 (See table)  
 Packaging Code \_\_\_\_\_  
 Blank = 1000 pcs./bag  
 TR = 5000 pcs./14-inch reel  
 Compliance Code \_\_\_\_\_  
 RC = RoHS compliant\*

#### Examples:

- 8230-22-RC = 1.20 mH packaged 1000 pcs./bag.
- 8230-50-TR-RC = 18 mH packaged 5000 pcs./14-inch reel.

### Electrical Schematic



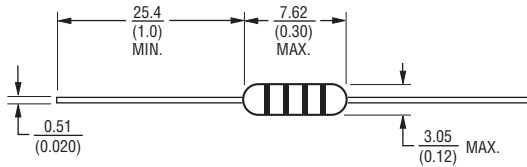
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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).

# 8230 Series Conformal Coated RF Choke

**BOURNS®**

## Product Dimensions

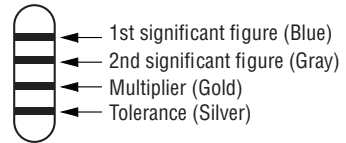


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

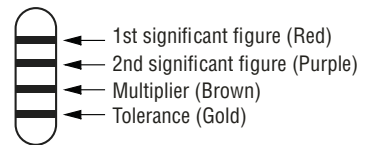
## Typical Part Marking - EIA Color Code

Color	1st & 2nd Significant Figure	Multiplier	Tolerance
Silver		0.01	±10 %
Gold		0.1	±5 %
Black	0	1	
Brown	1	10	
Red	2	100	
Orange	3	1000	
Yellow	4		
Green	5		
Blue	6		
Violet	7		
Gray	8		
White	9		

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. 08/09

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