



## Features

- Formerly *J.W. Miller* model
- Current rating up to 1.1 A
- Inductance range: 0.1  $\mu\text{H}$  to 1,000  $\mu\text{H}$
- 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
	( $\mu\text{H}$ )	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

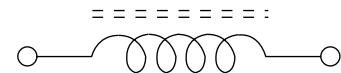
### How To Order

**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  $\mu\text{H}$  packaged 1000 pcs./bag.
  - 8230-50-TR-RC = 18  $\mu\text{H}$  packaged 5000 pcs./14-inch reel.

### Electrical Schematic

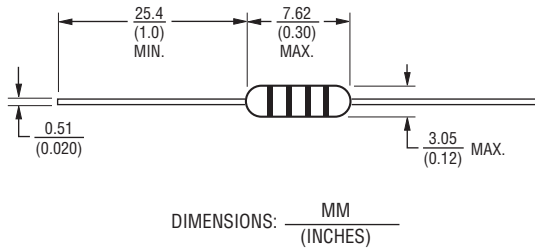


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# 8230 Series Conformal Coated RF Choke

**BOURNS®**

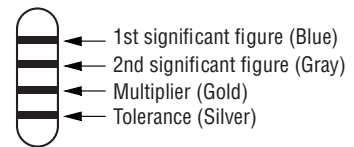
## Product Dimensions



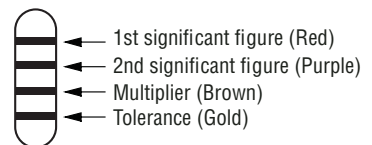
## Typical Part Marking - EIA Color Code

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 %



REV. 08/09

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