

BOURNS®

Features

- Formerly J. W. Miller® model
- Current rating up to 1.1 A
- Inductance range: 1.0 μ H to 1,000 μ 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 (Ω) Max. | Idc (mA) | Core Material |
|-----------------|------------|----------|-----------|----------------------------|----------------------|-----------------------------|-------------|------------------|
| | (μ H) | Tol. (%) | | | | | | |
| 8230-94-RC | 0.10 | ± 10 | 40 | 25 | 690 | 0.07 | 1100 | Phenolic |
| 8230-96-RC | 0.12 | ± 10 | 40 | 25 | 650 | 0.08 | 1100 | Phenolic |
| 8230-00-RC | 0.15 | ± 10 | 38 | 25 | 600 | 0.10 | 1100 | Phenolic |
| 8230-02-RC | 0.18 | ± 10 | 35 | 25 | 550 | 0.12 | 1010 | Phenolic |
| 8230-04-RC | 0.22 | ± 10 | 33 | 25 | 510 | 0.14 | 935 | Phenolic |
| 8230-06-RC | 0.27 | ± 10 | 33 | 25 | 430 | 0.16 | 875 | Phenolic |
| 8230-08-RC | 0.33 | ± 10 | 30 | 25 | 410 | 0.20 | 780 | Phenolic |
| 8230-10-RC | 0.39 | ± 10 | 30 | 25 | 380 | 0.30 | 640 | Phenolic |
| 8230-12-RC | 0.47 | ± 10 | 30 | 25 | 340 | 0.35 | 590 | Phenolic |
| 8230-14-RC | 0.56 | ± 10 | 30 | 25 | 300 | 0.50 | 495 | Phenolic |
| 8230-16-RC | 0.68 | ± 10 | 28 | 25 | 275 | 0.60 | 450 | Phenolic |
| 8230-18-RC | 0.82 | ± 10 | 28 | 25 | 250 | 0.85 | 380 | Phenolic |
| 8230-20-RC | 1.0 | ± 10 | 25 | 25 | 230 | 1.00 | 350 | Phenolic |
| 8230-22-RC | 1.2 | ± 10 | 25 | 7.9 | 150 | 0.18 | 825 | Ferrite |
| 8230-24-RC | 1.5 | ± 10 | 28 | 7.9 | 140 | 0.22 | 745 | Ferrite |
| 8230-26-RC | 1.8 | ± 10 | 30 | 7.9 | 125 | 0.30 | 640 | Ferrite |
| 8230-28-RC | 2.2 | ± 10 | 30 | 7.9 | 115 | 0.40 | 550 | Ferrite |
| 8230-30-RC | 2.7 | ± 10 | 37 | 7.9 | 100 | 0.50 | 495 | Ferrite |
| 8230-32-RC | 3.3 | ± 10 | 45 | 7.9 | 90 | 0.85 | 380 | Ferrite |
| 8230-34-RC | 3.9 | ± 10 | 45 | 7.9 | 82 | 1.0 | 350 | Ferrite |
| 8230-36-RC | 4.7 | ± 10 | 45 | 7.9 | 75 | 1.2 | 320 | Ferrite |
| 8230-38-RC | 5.6 | ± 10 | 50 | 7.9 | 68 | 1.8 | 260 | Ferrite |
| 8230-40-RC | 6.8 | ± 10 | 50 | 7.9 | 60 | 2.0 | 245 | Ferrite |
| 8230-42-RC | 8.2 | ± 10 | 55 | 7.9 | 55 | 2.7 | 210 | Ferrite |
| 8230-44-RC | 10 | ± 10 | 55 | 7.9 | 50 | 3.7 | 180 | Ferrite |
| 8230-46-RC | 12 | ± 10 | 45 | 2.5 | 40 | 2.7 | 210 | Ferrite |
| 8230-48-RC | 15 | ± 10 | 45 | 2.5 | 35 | 2.8 | 205 | Ferrite |
| 8230-50-RC | 18 | ± 10 | 50 | 2.5 | 32 | 3.1 | 195 | Ferrite |
| 8230-52-RC | 22 | ± 10 | 50 | 2.5 | 25 | 3.3 | 190 | Ferrite |
| 8230-54-RC | 27 | ± 10 | 50 | 2.5 | 22 | 3.5 | 185 | Ferrite |
| 8230-56-RC | 33 | ± 10 | 45 | 2.5 | 24 | 3.4 | 187 | Ferrite |
| 8230-58-RC | 39 | ± 10 | 45 | 2.5 | 22 | 3.6 | 180 | Ferrite |
| 8230-60-RC | 47 | ± 10 | 45 | 2.5 | 20 | 4.5 | 165 | Ferrite |
| 8230-62-RC | 56 | ± 10 | 45 | 2.5 | 18 | 5.7 | 145 | Ferrite |
| 8230-64-RC | 68 | ± 10 | 50 | 2.5 | 15 | 6.7 | 135 | Ferrite |
| 8230-66-RC | 82 | ± 10 | 50 | 2.5 | 14 | 7.3 | 130 | Ferrite |
| 8230-68-RC | 100 | ± 10 | 50 | 2.5 | 13 | 8.0 | 125 | Ferrite |
| 8230-70-RC | 120 | ± 10 | 30 | 0.79 | 12 | 13 | 97 | Ferrite |
| 8230-72-RC | 150 | ± 10 | 30 | 0.79 | 11 | 15 | 85 | Ferrite |
| 8230-74-RC | 180 | ± 10 | 30 | 0.79 | 10 | 17 | 79 | Ferrite |
| 8230-76-RC | 220 | ± 10 | 30 | 0.79 | 9.0 | 21 | 73 | Ferrite |
| 8230-78-RC | 270 | ± 10 | 30 | 0.79 | 8.0 | 25 | 65 | Ferrite |
| 8230-80-RC | 330 | ± 10 | 30 | 0.79 | 4.0 | 28 | 62 | Ferrite |
| 8230-82-RC | 390 | ± 10 | 30 | 0.79 | 6.6 | 35 | 55 | Ferrite |
| 8230-84-RC | 470 | ± 10 | 30 | 0.79 | 6.0 | 42 | 50 | Ferrite |
| 8230-86-RC | 560 | ± 10 | 30 | 0.79 | 5.0 | 46 | 48 | Ferrite |
| 8230-88-RC | 680 | ± 10 | 30 | 0.79 | 4.2 | 60 | 42 | Ferrite |
| 8230-90-RC | 820 | ± 10 | 30 | 0.79 | 3.8 | 65 | 40 | Ferrite |
| 8230-92-RC | 1,000 | ± 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

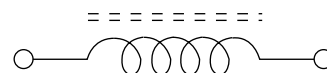
8230 - 22 - - RC

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



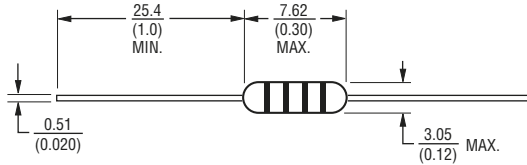
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

8230 Series Conformal Coated RF Choke

BOURNS®

Product Dimensions

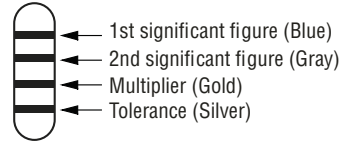


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

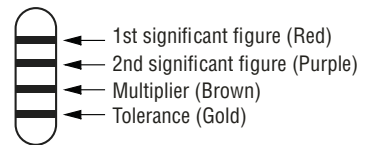
Typical Part Marking - EIA Color Code

| 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 μH
6.8 μH , ±10 %



Example for L value 10 μH and higher
270 μH , ±5 %



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REV. 08/09

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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