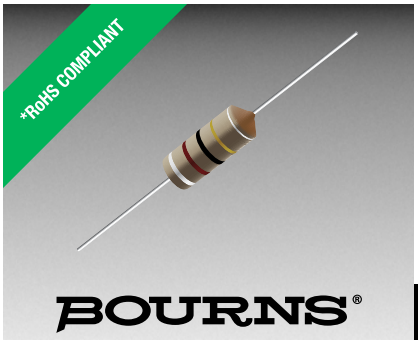


Features

- Formerly J.W. Miller® model
- Current rating up to 3 A
- Inductance range: 0.1 µH to 100,000 µH
- Shielded
- RoHS compliant*

Applications

- Signal processing
- Telecommunications
- Dense board designs

8250 Series – Shielded RF Choke

Electrical Specifications (@ 25 °C)

Part Number	Inductance (µH) ±10 %	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (Ω) max.	Idc (mA)	Isat (mA)
8250-R10K-RC	0.10	50	25	400	0.026	3000	3000
8250-R12K-RC	0.12	50	25	400	0.029	2860	2860
8250-R15K-RC	0.15	50	25	400	0.034	2600	2600
8250-R18K-RC	0.18	50	25	400	0.044	2300	2300
8250-R22K-RC	0.22	50	25	400	0.056	2050	2050
8250-R27K-RC	0.27	50	25	400	0.090	1625	1625
8250-R33K-RC	0.33	47	25	325	0.122	1400	1400
8250-R39K-RC	0.39	47	25	390	0.161	1220	1220
8250-R47K-RC	0.47	47	25	264	0.218	1060	1060
8250-R56K-RC	0.56	45	25	249	0.290	900	900
8250-R68K-RC	0.68	43	25	221	0.382	790	790
8250-R82K-RC	0.82	41	25	200	0.450	725	725
8250-1R0K-RC	1.0	42	25	156	0.054	2080	2080
8250-1R2K-RC	1.2	43	7.9	144	0.070	1840	1840
8250-1R5K-RC	1.5	41	7.9	128	0.096	1560	1560
8250-1R8K-RC	1.8	42	7.9	121	0.107	1480	1480
8250-2R2K-RC	2.2	42	7.9	108	0.142	1290	1290
8250-2R7K-RC	2.7	41	7.9	96	0.284	1130	1130
8250-3R3K-RC	3.3	41	7.9	88	0.260	950	950
8250-3R9K-RC	3.9	41	7.9	84	0.354	815	815
8250-4R7K-RC	4.7	42	7.9	72	0.168	710	710
8250-5R6K-RC	5.6	42	7.9	69	0.511	680	680
8250-6R8K-RC	6.8	42	7.9	62	0.750	560	560
8250-8R2K-RC	8.2	46	7.9	58	0.828	535	535
8250-100K-RC	10	46	7.9	53	1.270	532	532
8250-120K-RC	12	50	2.5	47	1.760	368	368
8250-150K-RC	15	50	2.5	41	2.300	325	325
8250-180K-RC	18	50	2.5	43	0.677	596	235
8250-220K-RC	22	50	2.5	38	0.742	565	220
8250-270K-RC	27	50	2.5	36	0.850	526	200
8250-330K-RC	33	50	2.5	33	0.928	505	190
8250-390K-RC	39	50	2.5	29.4	1.28	429	180
8250-470K-RC	47	55	2.5	26.5	1.48	400	175
8250-560K-RC	56	55	2.5	25	1.64	380	160
8250-680K-RC	68	55	2.5	23	2.20	328	150
8250-820K-RC	82	55	2.5	14	1.96	349	140
8250-101K-RC	100	65	2.5	12	2.28	322	120
8250-121K-RC	120	65	0.79	11.2	2.45	311	95
8250-151K-RC	150	65	0.79	10.5	2.79	294	90
8250-181K-RC	180	65	0.79	10.0	3.08	277	85
8250-221K-RC	220	65	0.79	9.4	3.48	251	80
8250-271K-RC	270	65	0.79	8.0	4.55	231	70
8250-331K-RC	330	65	0.79	7.3	5.10	215	65
8250-391K-RC	390	65	0.79	6.9	5.62	205	60
8250-471K-RC	470	70	0.79	6.5	6.45	192	58
8250-561K-RC	560	70	0.79	6.0	8.00	174	55
8250-681K-RC	680	75	0.79	5.6	8.85	163	50

~ Continued on page 2 ~

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

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Additional Information

Click these links for more information:

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General Specifications

Temperature Rise ..... 35 °C at Idc
Rated Current ..... Inductance drop 5 % typical at Isat
Operating Temperature ..... -55 °C to +105 °C
Storage Temperature ..... -55 °C to +105 °C

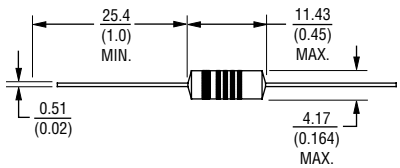
Materials

Core Material ..... Ferrite
Wire ..... Enameled copper
Terminal Coating ..... Sn

Packaging

Standard ..... 500 pcs. per bag
Optional ..... 2500 pcs. per 14-inch reel

Product Dimensions



DIMENSIONS: MM (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.

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

Electrical Specifications (@ 25 °C) - Continued

Part Number	Inductance (µH) ±10 %	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (Ω) max.	Idc (mA)	Isat (mA)
8250-821K-RC	820	70	0.79	4.8	10.4	151	45
8250-102K-RC	1000	65	0.79	4.5	12.1	139	40
8250-122K-RC	1200	70	0.25	2.6	15.1	125	35
8250-152K-RC	1500	70	0.25	2.5	16.8	119	33
8250-182K-RC	1800	70	0.25	2.3	19.1	111	30
8250-222K-RC	2200	70	0.25	2.2	22.0	103	27
8250-272K-RC	2700	70	0.25	2.1	25.1	97	25
8250-332K-RC	3300	70	0.25	2	33.3	85	22
8250-392K-RC	3900	70	0.25	1.8	36.8	80	20
8250-472K-RC	4700	70	0.25	1.7	51.2	68	19
8250-562K-RC	5600	70	0.25	1.6	54.6	66	17
8250-682K-RC	6800	70	0.25	1.5	62	62	16
8250-822K-RC	8200	70	0.25	1.4	86.6	52	15
8250-103K-RC	10,000	70	0.25	1.3	93.1	50	14
8250-123K-RC	12,000	50	0.079	0.88	84	53	13
8250-153K-RC	15,000	50	0.079	0.78	97	49	12
8250-183K-RC	18,000	50	0.079	0.72	104	48	10
8250-223K-RC	22,000	50	0.079	0.57	145	40	9
8250-273K-RC	27,000	50	0.079	0.46	195	34	8
8250-333K-RC	33,000	50	0.079	0.42	222	32	7.5
8250-393K-RC	39,000	50	0.079	0.42	242	31	6
8250-473K-RC	47,000	50	0.079	0.37	317	27	5.5
8250-563K-RC	56,000	50	0.079	0.36	362	25	5
8250-683K-RC	68,000	50	0.079	0.35	410	24	4
8250-823K-RC	82,000	50	0.079	0.34	440	23	3.5
8250-104K-RC	100,000	50	0.079	0.32	484	22	3

How To Order

8250 - 101K - ___ - RC

Model

Value Code (see table)

Packaging Code
Blank = 500 pcs. per bag
TR = 2500 pcs. per reel

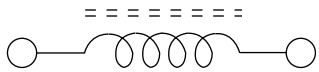
Compliance Code
RC = RoHS Compliant

Examples:

8250-151K-RC = 150 µH, packaged 500 pcs. per bag

8250-R39K-TR-RC = 0.39 µH, packaged 2500 pcs. per 14-inch reel

Electrical Schematic



BOURNS®

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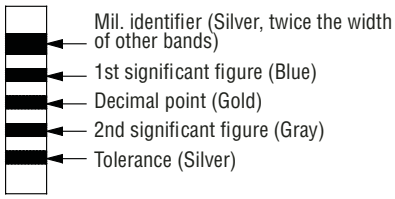
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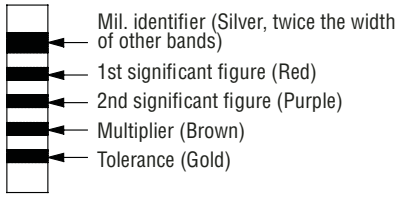
Typical Part Marking - MIL-STD Color Code

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 µH
6.8 µH, ±10 %



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



REV. 03/25

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