



BOURNS®

Features

- Current rating up to 1.2 A
- Dielectric strength: 500 VRMS
- RoHS compliant*

Applications

- DC/DC converters
- Power supplies
- General use

78F Series Conformal Coated RF Choke

Electrical Specifications (@ 25 °C)

Part Number	Value (µH)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) Max.	IDC (mA) Max.
78FR10K-RC	0.10 ±10 %	20	25	400	0.060	1200
78FR12K-RC	0.12 ±10 %	20	25	400	0.070	1200
78FR15K-RC	0.15 ±10 %	20	25	380	0.070	1200
78FR18K-RC	0.18 ±10 %	20	25	380	0.073	1150
78FR22K-RC	0.22 ±10 %	40	25	380	0.075	1150
78FR27K-RC	0.27 ±10 %	40	25	360	0.085	1110
78FR33K-RC	0.33 ±10 %	40	25	335	0.095	1110
78FR39K-RC	0.39 ±10 %	40	25	310	0.10	1000
78FR47K-RC	0.47 ±10 %	40	25	270	0.11	1000
78FR56K-RC	0.56 ±10 %	40	25	245	0.12	950
78FR68K-RC	0.68 ±10 %	40	25	230	0.13	900
78FR82K-RC	0.82 ±10 %	40	25	200	0.14	875
78F1R0K-RC	1.0 ±10 %	40	25	180	0.15	815
78F1R2K-RC	1.2 ±10 %	40	7.9	165	0.18	740
78F1R5K-RC	1.5 ±10 %	50	7.9	150	0.20	700
78F1R8K-RC	1.8 ±10 %	50	7.9	125	0.23	655
78F2R2K-RC	2.2 ±10 %	50	7.9	110	0.25	630
78F2R7K-RC	2.7 ±10 %	50	7.9	95	0.28	595
78F3R3J-RC	3.3 ±5 %	50	7.9	60	0.30	575
78F3R9J-RC	3.9 ±5 %	45	7.9	50	0.32	555
78F4R7J-RC	4.7 ±5 %	45	7.9	38	0.35	530
78F5R6J-RC	5.6 ±5 %	45	7.9	32	0.40	500
78F6R8J-RC	6.8 ±5 %	40	7.9	28	0.45	470
78F8R2J-RC	8.2 ±5 %	40	7.9	20	0.55	425
78F100J-RC	10 ±5 %	40	7.9	18	0.75	370
78F120J-RC	12 ±5 %	45	2.5	16	0.80	350
78F150J-RC	15 ±5 %	50	2.5	16	0.93	335
78F180J-RC	18 ±5 %	50	2.5	15	1.00	315
78F220J-RC	22 ±5 %	50	2.5	13	1.20	285
78F270J-RC	27 ±5 %	50	2.5	11	1.35	270
78F330J-RC	33 ±5 %	50	2.5	10	1.50	255
78F390J-RC	39 ±5 %	50	2.5	9.50	1.70	240
78F470J-RC	47 ±5 %	60	2.5	8.50	2.70	205
78F560J-RC	56 ±5 %	60	2.5	7.50	2.95	195
78F680J-RC	68 ±5 %	60	2.5	6.50	3.30	185
78F820J-RC	82 ±5 %	60	2.5	6.00	3.60	175
78F101J-RC	100 ±5 %	60	2.5	5.50	4.10	165
78F121J-RC	120 ±5 %	60	0.79	5.40	4.70	160
78F151J-RC	150 ±5 %	60	0.79	4.75	5.40	150
78F181J-RC	180 ±5 %	60	0.79	4.35	6.00	140
78F221J-RC	220 ±5 %	60	0.79	4.00	6.80	130
78F271J-RC	270 ±5 %	60	0.79	3.70	7.70	120
78F331J-RC	330 ±5 %	60	0.79	3.40	11.1	100
78F391J-RC	390 ±5 %	60	0.79	2.80	12.6	95
78F471J-RC	470 ±5 %	60	0.79	2.55	14.0	90
78F561J-RC	560 ±5 %	60	0.79	2.35	15.5	85
78F681J-RC	680 ±5 %	60	0.79	2.00	25.3	68
78F821J-RC	820 ±5 %	60	0.79	1.50	27.5	65
78F102J-RC	1000 ±5 %	60	0.79	1.20	31.4	60

General Specifications

Temperature Rise 35 °C
at rated current
 Operating Temperature Range
 -55 °C to +105 °C
 (including temperature rise)
 Storage Temperature Range
 -55 °C to +105 °C

Materials

Core Material Ferrite DR core
 Wire Enamelled copper wire
 Terminal Cu/Ni/Sn
 Coating Epoxy resin
 Packaging
 Standard 5000 pcs. per bag
 Optional 5000 pcs. per 14-inch reel

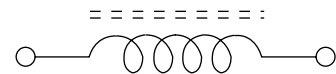
How to Order

Model 78F 100 J - RC
 Value Code (see table) _____
 Tolerance Code (see table) _____
 Packaging _____
 Blank = 5,000 pcs./bag
 -TR = 5,000 pcs./14" reel
 RoHS Compliant _____

Examples:

- 78F1R0K-RC = 1.0 mH Model 78F packaged 5,000 pcs. per bag.
- 78F100J-TR-RC = 10 mH Model 78F packaged 5,000 pcs. per reel.

Electrical Schematic

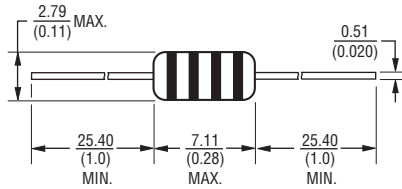


*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

78F Series Conformal Coated RF Choke

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Product Dimensions

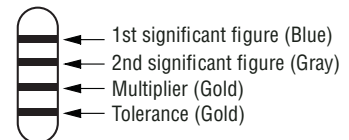


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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 6.8 μH , ±5 %



Example for 270 μH , ±5 %

