

Features

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

Applications

- DC/DC converters
- Power supplies
- General use

BOURNS®

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
Moisture Sensitivity Level..... 1
ESD Classification (HBM)..... N/A

Materials

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

How to Order

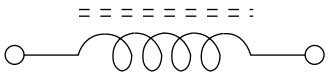
78F 100 J __ - RC

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

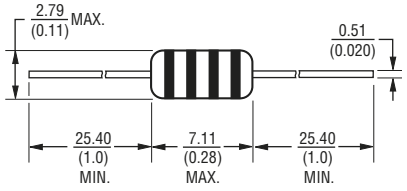
Examples:

- *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



Product Dimensions

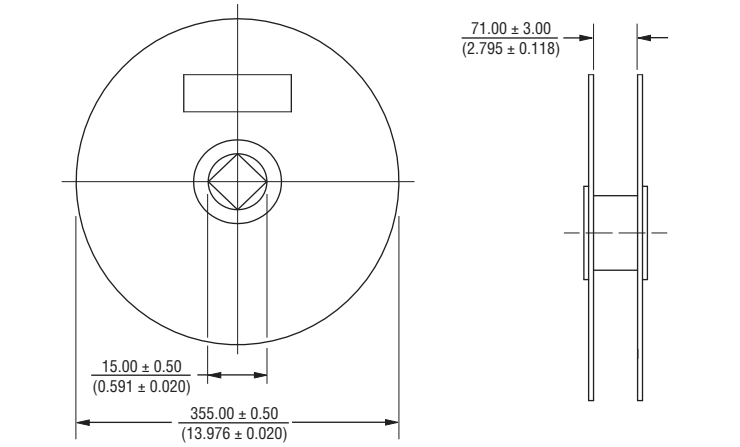


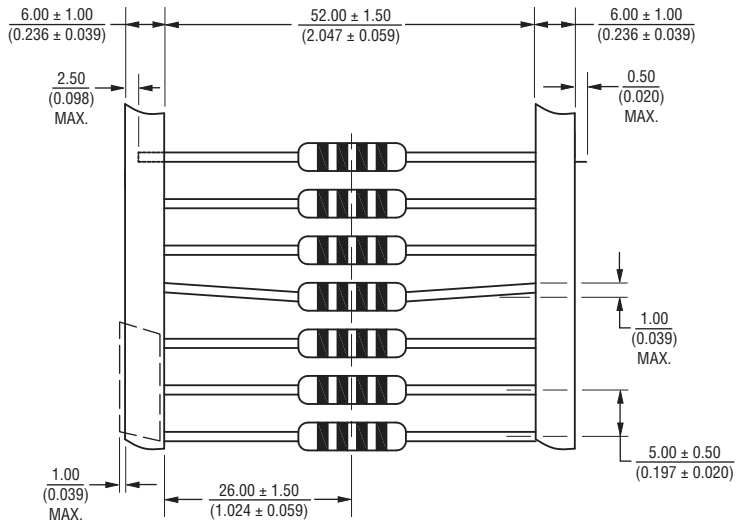
DIMENSIONS: MM / (INCHES)

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.

Packaging Specifications



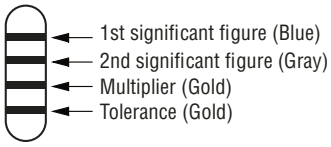


DIMENSIONS: MM (INCHES)

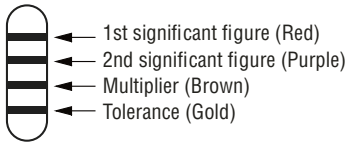
Typical Part Marking - EIA Color Code

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 %



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REV. 01/18

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