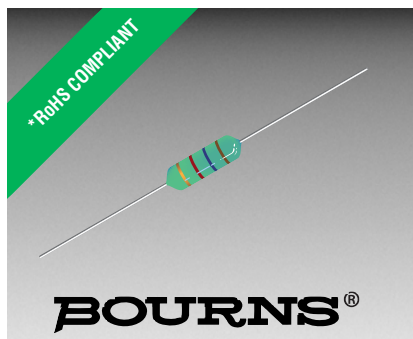




## Features

- Formerly J.W. Miller® model
- Current rating up to 920 mA
- Inductance range: 1.0  $\mu$ H to 1,000  $\mu$ H
- RoHS compliant\*

## Applications

- DC/DC converters
- Power supplies
- General use

# 77F 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) |
|-----------------|------------|----------|--------|----------------------|----------------|-----------------------|----------|
|                 | ( $\mu$ H) | Tol. (%) |        |                      |                |                       |          |
| 77F1R0K-RC      | 1.0        | $\pm 10$ | 50     | 25.2                 | 157            | 0.17                  | 920      |
| 77F1R2K-RC      | 1.2        | $\pm 10$ | 50     | 7.96                 | 144            | 0.18                  | 880      |
| 77F1R5K-RC      | 1.5        | $\pm 10$ | 50     | 7.96                 | 131            | 0.20                  | 830      |
| 77F1R8K-RC      | 1.8        | $\pm 10$ | 50     | 7.96                 | 121            | 0.22                  | 790      |
| 77F2R2K-RC      | 2.2        | $\pm 10$ | 50     | 7.96                 | 110            | 0.24                  | 750      |
| 77F2R7K-RC      | 2.7        | $\pm 10$ | 60     | 7.96                 | 100            | 0.25                  | 720      |
| 77F3R3K-RC      | 3.3        | $\pm 10$ | 60     | 7.96                 | 94             | 0.30                  | 670      |
| 77F3R9K-RC      | 3.9        | $\pm 10$ | 60     | 7.96                 | 86             | 0.35                  | 640      |
| 77F4R7K-RC      | 4.7        | $\pm 10$ | 70     | 7.96                 | 80             | 0.40                  | 620      |
| 77F5R6K-RC      | 5.6        | $\pm 10$ | 70     | 7.96                 | 74             | 0.45                  | 590      |
| 77F6R8K-RC      | 6.8        | $\pm 10$ | 75     | 7.96                 | 68             | 0.50                  | 550      |
| 77F8R2K-RC      | 8.2        | $\pm 10$ | 80     | 7.96                 | 53             | 0.52                  | 530      |
| 77F100K-RC      | 10         | $\pm 10$ | 85     | 7.96                 | 40             | 0.65                  | 500      |
| 77F120K-RC      | 12         | $\pm 10$ | 75     | 2.52                 | 34             | 0.70                  | 480      |
| 77F150K-RC      | 15         | $\pm 10$ | 70     | 2.52                 | 20             | 0.75                  | 460      |
| 77F180K-RC      | 18         | $\pm 10$ | 60     | 2.52                 | 14             | 0.80                  | 430      |
| 77F220K-RC      | 22         | $\pm 10$ | 60     | 2.52                 | 9.9            | 0.90                  | 410      |
| 77F270K-RC      | 27         | $\pm 10$ | 50     | 2.52                 | 7.6            | 1.00                  | 390      |
| 77F330J-RC      | 33         | $\pm 5$  | 50     | 2.52                 | 6.5            | 1.10                  | 370      |
| 77F390J-RC      | 39         | $\pm 5$  | 50     | 2.52                 | 6.5            | 1.20                  | 350      |
| 77F470J-RC      | 47         | $\pm 5$  | 45     | 2.52                 | 6.3            | 1.30                  | 340      |
| 77F560J-RC      | 56         | $\pm 5$  | 45     | 2.52                 | 6.2            | 1.50                  | 320      |
| 77F680J-RC      | 68         | $\pm 5$  | 40     | 2.52                 | 5.7            | 1.80                  | 305      |
| 77F820J-RC      | 82         | $\pm 5$  | 35     | 2.52                 | 5.3            | 2.00                  | 290      |
| 77F101J-RC      | 100        | $\pm 5$  | 30     | 2.52                 | 4.8            | 2.50                  | 275      |
| 77F121J-RC      | 120        | $\pm 5$  | 60     | 0.796                | 3.8            | 3.0                   | 185      |
| 77F151J-RC      | 150        | $\pm 5$  | 60     | 0.796                | 3.5            | 4.0                   | 175      |
| 77F181J-RC      | 180        | $\pm 5$  | 60     | 0.796                | 3.0            | 4.5                   | 165      |
| 77F221J-RC      | 220        | $\pm 5$  | 60     | 0.796                | 2.8            | 5.0                   | 155      |
| 77F271J-RC      | 270        | $\pm 5$  | 60     | 0.796                | 2.6            | 6.0                   | 145      |
| 77F331J-RC      | 330        | $\pm 5$  | 60     | 0.796                | 2.4            | 6.5                   | 137      |
| 77F391J-RC      | 390        | $\pm 5$  | 55     | 0.796                | 2.0            | 7.5                   | 133      |
| 77F471J-RC      | 470        | $\pm 5$  | 50     | 0.796                | 1.8            | 8.5                   | 126      |
| 77F561J-RC      | 560        | $\pm 5$  | 50     | 0.796                | 1.6            | 9.5                   | 120      |
| 77F681J-RC      | 680        | $\pm 5$  | 45     | 0.796                | 1.6            | 12.0                  | 113      |
| 77F821J-RC      | 820        | $\pm 5$  | 45     | 0.796                | 1.4            | 14.0                  | 105      |
| 77F102J-RC      | 1000       | $\pm 5$  | 50     | 0.796                | 1.2            | 20.0                  | 100      |

## 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

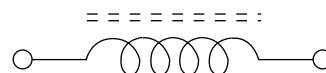
## Materials

Core..... Ferrite  
 Wire ..... Polyester copper  
 Terminal Coating..... Sn-Ag-Cu alloy  
 Coating..... Epoxy resin  
 Packaging..... 5000 pcs. per 14-inch reel

## How to Order

Model **77F 151J - TR - RC**  
 Value Code .....  
 (See table)  
 Packaging Code .....  
 TR = 5000 pcs./14-inch reel  
 Compliance Code .....  
 RC = RoHS compliant\*  
 Example:  
 77F102J-TR-RC = 1000  $\mu$ H packaged  
 5000 pcs./14-inch reel.

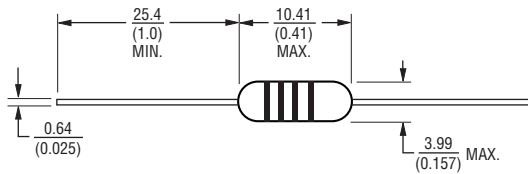
## Electrical Schematic



## 77F Series Conformal Coated RF Choke

**BOURNS®**

### Product Dimensions

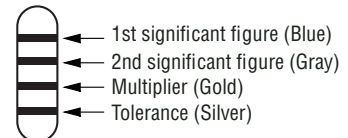


DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

### 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 6.8  $\mu\text{H}$ , ±10 %



Example for 270  $\mu\text{H}$ , ±5 %

