

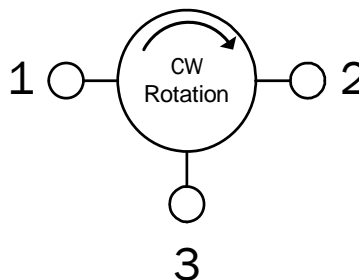


### Features

- Typical Insertion Loss Less than 0.20dB
- 70dBc IMD Typical
- Isolation Greater than 23dB
- Industry Standard 0.75" x 0.75" Drop-in Package

### Applications

- Wireless Infrastructure Systems; WiMAX



Functional Block Diagram

### Product Description

The RFCR2802 is a small profile, low-cost drop-in circulator designed for various wireless applications. The circulator features a robust construction for high reliability, low insertion loss, excellent IMD (Inter-Modulation Distortion) performance, and magnetically shield. The circulator is RoHS compliant.

The RFCR2802 circulator is CW (Clockwise) rotation.

### Ordering Information

RFCR2802	3600MHz to 3800MHz Single Junction Drop-In Circulator
RFCR2802PCBA-41X	Fully Assembled Evaluation Board

### Optimum Technology Matching® Applied

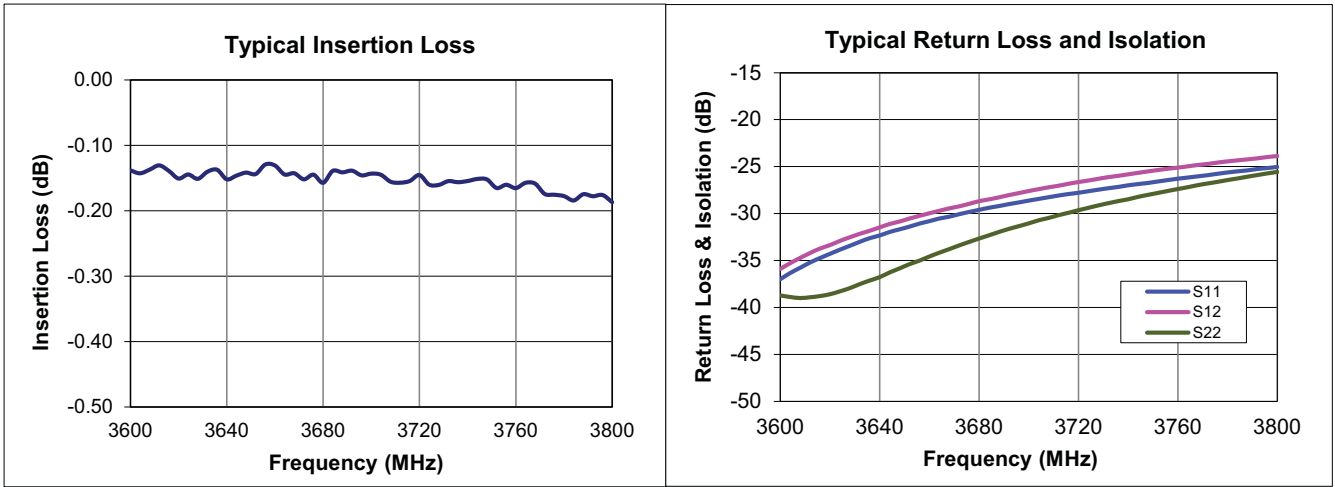
- |                                      |                                      |                                     |                                    |
|--------------------------------------|--------------------------------------|-------------------------------------|------------------------------------|
| <input type="checkbox"/> GaAs HBT    | <input type="checkbox"/> SiGe BiCMOS | <input type="checkbox"/> GaAs pHEMT | <input type="checkbox"/> GaN HEMT  |
| <input type="checkbox"/> GaAs MESFET | <input type="checkbox"/> Si BiCMOS   | <input type="checkbox"/> Si CMOS    | <input type="checkbox"/> BiFET HBT |
| <input type="checkbox"/> InGaP HBT   | <input type="checkbox"/> SiGe HBT    | <input type="checkbox"/> Si BJT     | <input type="checkbox"/> LDMOS     |

Absolute Maximum Ratings

Parameter	Rating	Unit
Forward Power	100	W
Reverse Power	50	W
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +95	°C

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	3600		3800	MHz	
Insertion Loss		<0.20	0.25	dB	
Isolation	22	>23		dB	
Return Loss	22	>23		dB	
FWD IMD			-70	dBm	2T at 20dBm per T; 5Mhz Spacing, Room Temp

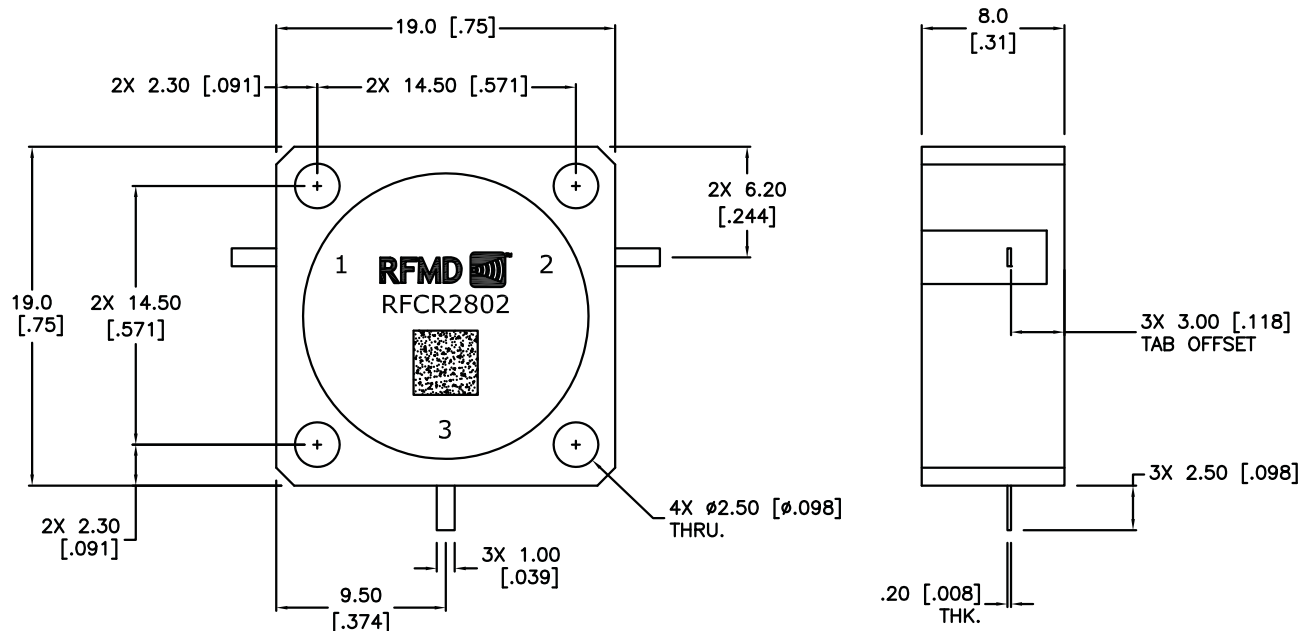
Note: Typical values represent Mid-band performance at 23 °C



Pin	Name	Description
1	INPUT	
2	OUTPUT	
3	TERMINATED	

## Package Drawing

Dimensions in millimeters (inches)



Unless otherwise specified dimensions are in mm/[inches].

Tolerances are:

Fractions	Decimals	Angles
$\pm$	.x $\pm$ .3 [0.01]	$\pm 0.5^\circ$
	.xx $\pm$ .13 [0.005]	