



Package: Drop-in, 0.75" x 0.75"

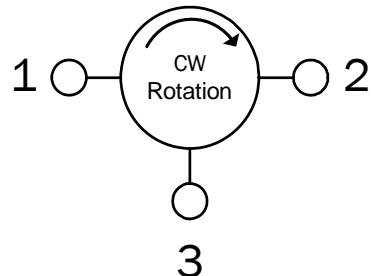


## Features

- 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

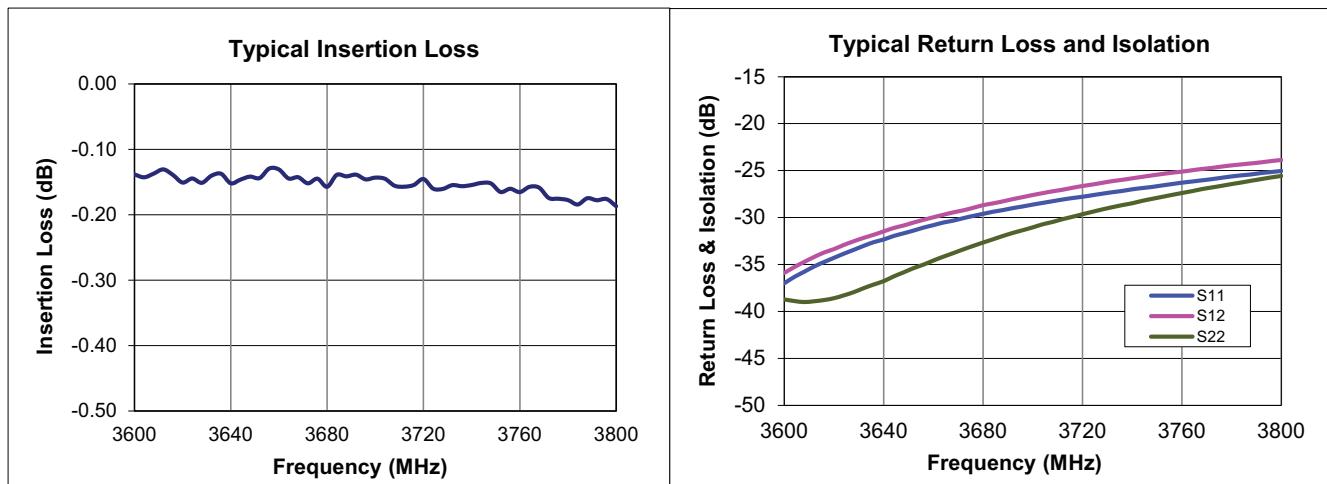
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## Absolute Maximum Ratings

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

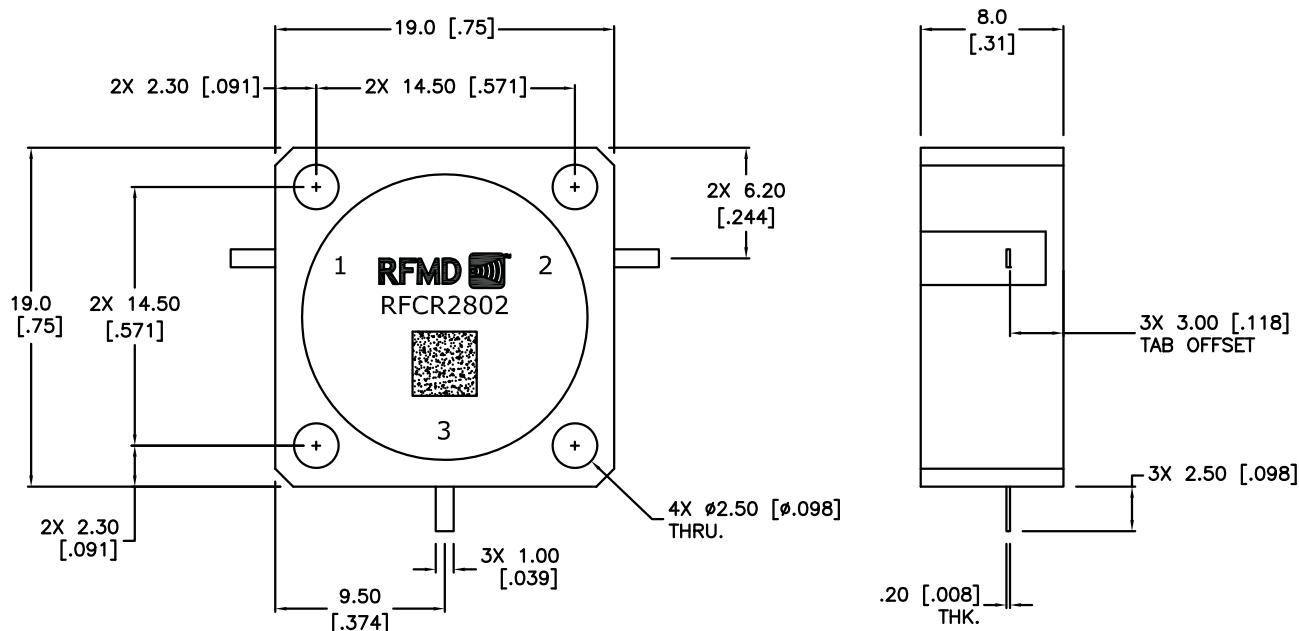
Note: Typical values represent Mid-band performance at 23°C



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 [.01]	$\pm$ 0.5°
	.xx $\pm$ .13 [.005]	