



Package: Drop-in, 1in x 1in

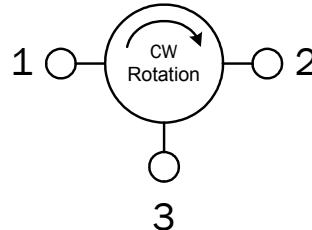


### Features

- Typical Insertion Loss Less than 0.2dB
- -70dBc IMD Typical
- Isolation Greater than 23dB
- 200 W Forward and Reverse Power Rating
- Industry Standard 1.0 x 1.0 Inch Drop-in Package

### Applications

- Wireless Infrastructure Systems: DCS 1800, CDMA.



Functional Block Diagram

### Product Description

The RFCR2502 is a small profile, low cost drop-in circulator 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 RFCR2502 circulator is CW (Clockwise) rotation.

### Ordering Information

RFCR2502 1805MHz to 1880MHz Single Junction Drop-In Circulator  
RFCR2502PCBA-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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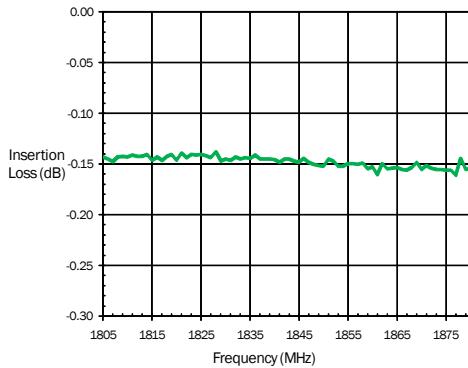
## Absolute Maximum Ratings

Parameter	Rating	Unit
Forward Power (Peak/Average)	1000/200	W
Reverse Power	200	W
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +95	°C

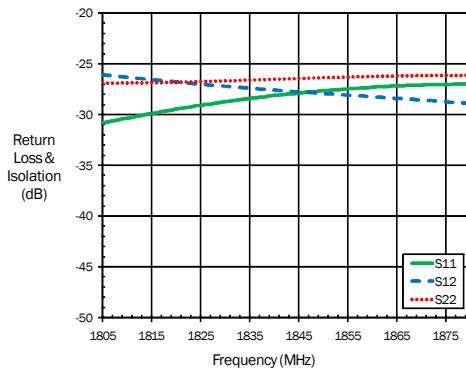
Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
<b>Overall</b>					
Frequency Range	1805		1880	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	20	>23		dB	
Return Loss	20	>23		dB	
IMD		-70		dBc	2Tx37.0Watts

Note: Typical values represent Mid-band performance at 25°C

Typical Insertion Loss



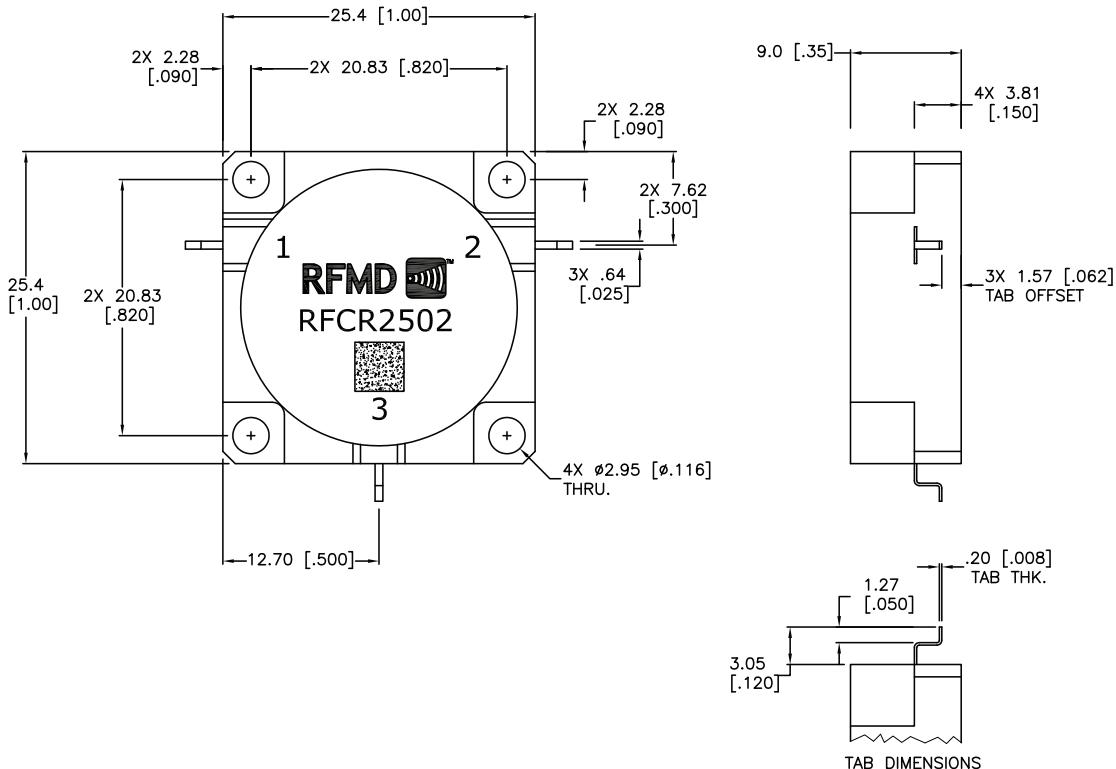
Typical Return Loss and Isolation



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]	$\pm 0.5^\circ$
	$.xx \pm .13$ [.005]	