

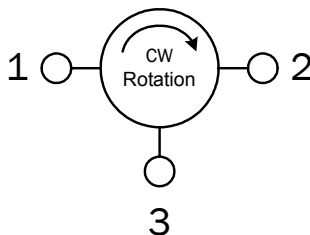


Features

- Typical Insertion Loss Less than 0.2dB
- -70dBc IMD Typical
- Isolation Greater than 23dB
- 300W Forward and Reverse Power Rating
- Industry Standard 1.0x1.0 Inch Drop-in Package

Applications

- AMPS, GSM, IS-95 (CDMA), IS-136 (D-AMPS), 3G



Functional Block Diagram

Product Description

The RFCR2203 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 RFCR2203 circulator is CW (Clockwise) rotation.

Ordering Information

RFCR2203 869MHz to 894MHz Single Junction Drop-In Circulator
RFCR2203PCBA-41X Fully Assembled Evaluation Board

Optimum Technology Matching® Applied

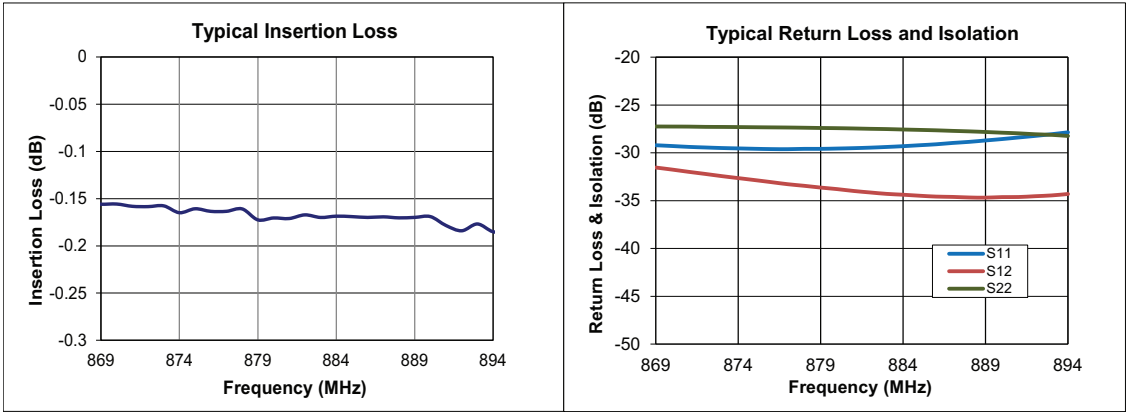
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|--------------------------------------|--------------------------------------|-------------------------------------|------------------------------------|
| <input type="checkbox"/> GaAs HBT | <input type="checkbox"/> SiGe BiCMOS | <input type="checkbox"/> 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 (Peak/Average)	1000/300	W
Reverse Power	300	W
Operating Temperature	-40 to +125	°C
Storage Temperature	-40 to +125	°C

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	869		894	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	20	>23		dB	
Return Loss	20	>23		dB	
IMD		-70		dBc	2Tx37.0Watts per T 1MHz Spacing (dBm)

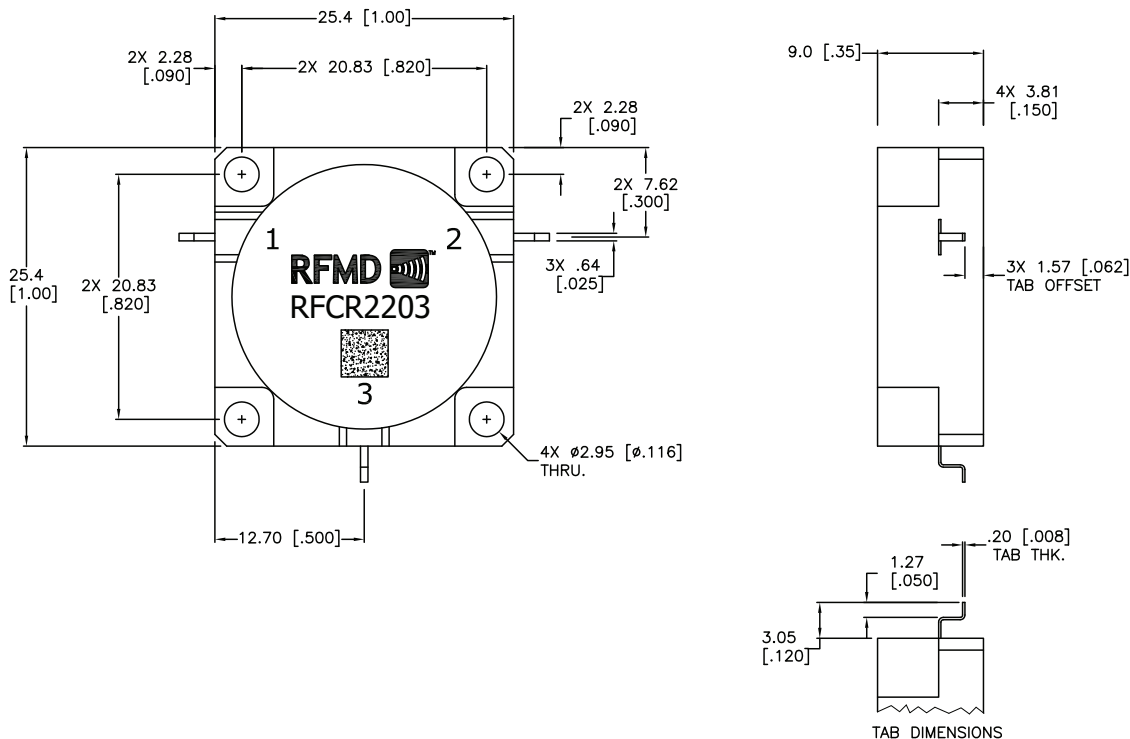
Note: Typical values represent Mid-band performance at 23 °C



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