



Package: Drop-in, 1in x 1in

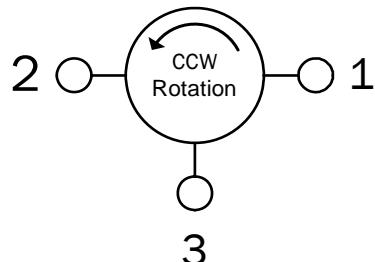


Features

- Typical Insertion Loss Less than 0.2dB
- 75dBc IMD Typical
- Isolation Greater than 23dB
- 200W Forward and Reverse Rating
- Industry Standard 1.0x1.0 Inch Drop-in Package

Applications

- Wireless Infrastructure Systems:
3G, 4G, LTE.



Functional Block Diagram

Product Description

The RFCR2709 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 RFCR2709 circulator is CW (Counter Clockwise) rotation.

Ordering Information

RFCR2709 2090MHz to 2190MHz Single Junction Drop-In Circulator
RFCR2709PCBA-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

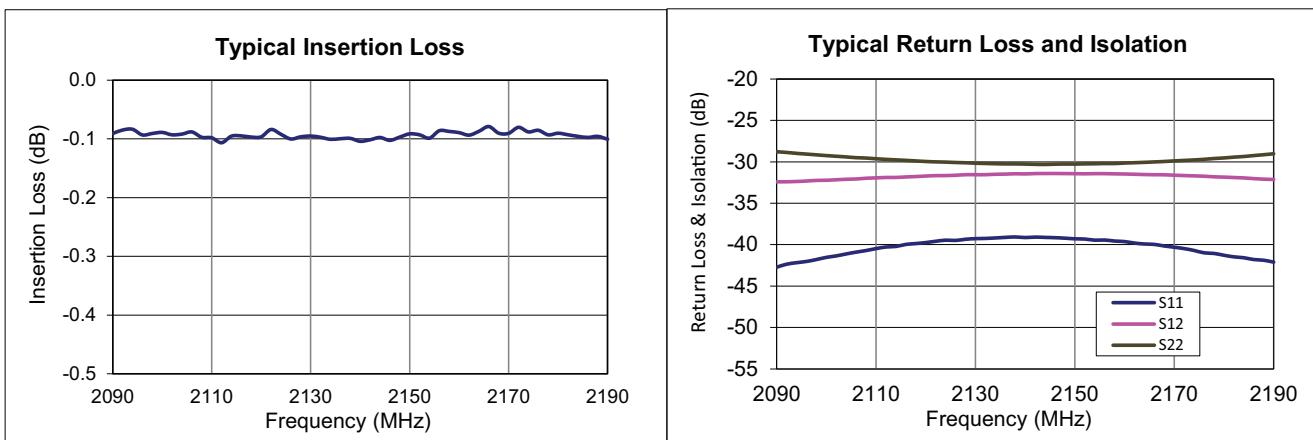
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Absolute Maximum Ratings

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.		
Overall					
Frequency Range	2090		2190	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	20	>23		dB	
Return Loss	20	>23		dB	
Forward IMD		-75		dBm	2Ts at 37W per T, 5MHz Spacing

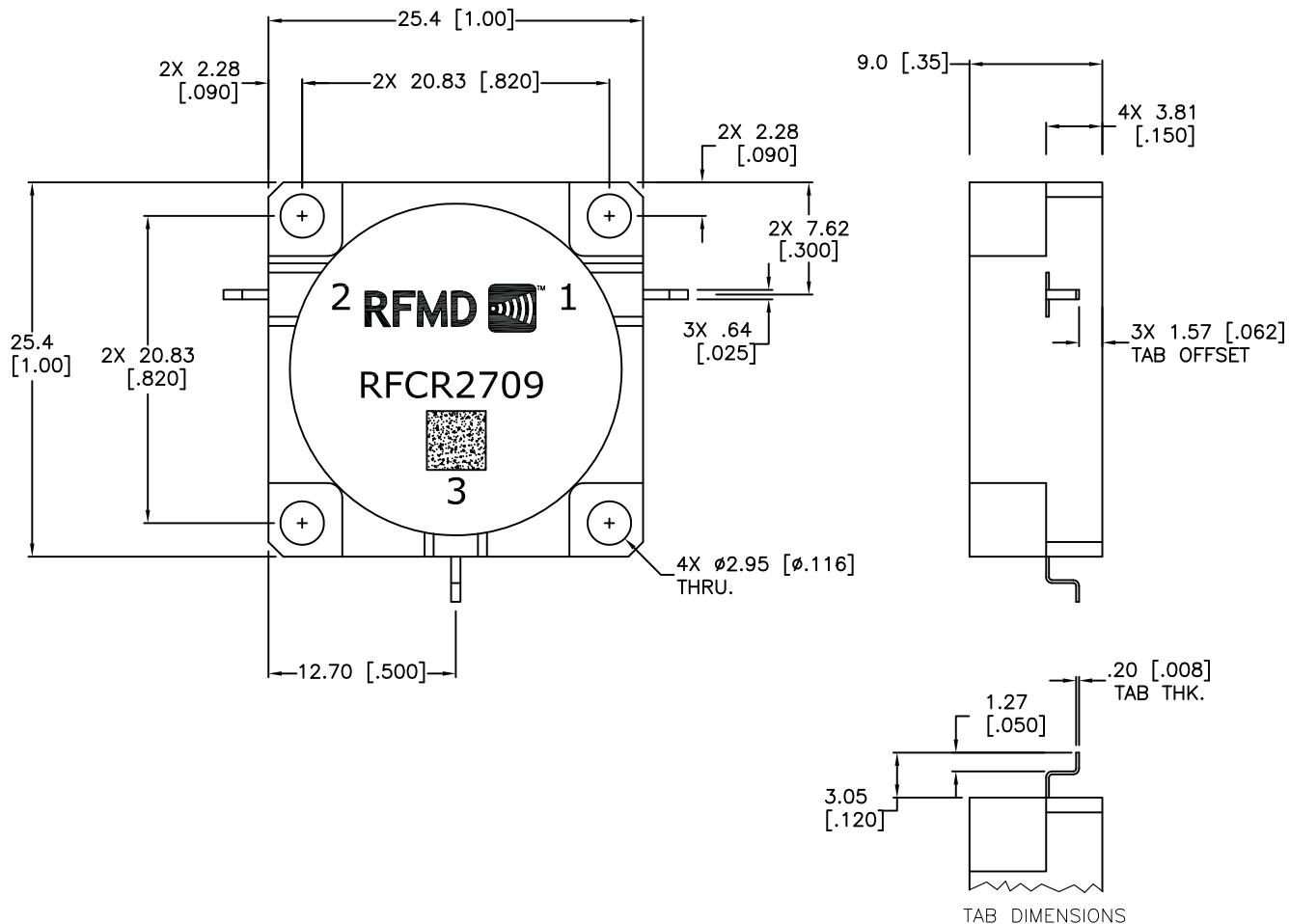
Note: Typical values represent Mid-band performance at 23°C



Pin	Name	Description
1	OUTPUT	
2	INPUT	
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]	