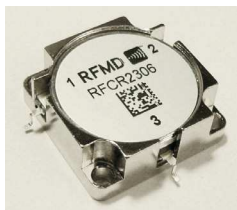


Package: Drop-in, 1in x 1in

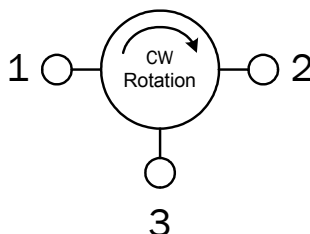


Features

- Typical Insertion Loss Less than 0.2dB
- -70dBc IMD Typical
- Isolation Greater than 23dB
- 200W Forward and Reverse Power Rating
- Industry Standard 1.0x1.0 Inch Drop-in Package

Applications

- Wireless Infrastructure Systems: GSM 900 (P-GSM & G-GSM), GSM-R (R-GSM).



Functional Block Diagram

Product Description

The RFCR2306 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 RFCR2306 circulator is CW (Clockwise) rotation.

Ordering Information

RFCR2306 920MHz to 960MHz Single Junction Drop-In Circulator
RFCR2306PCBA-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 |

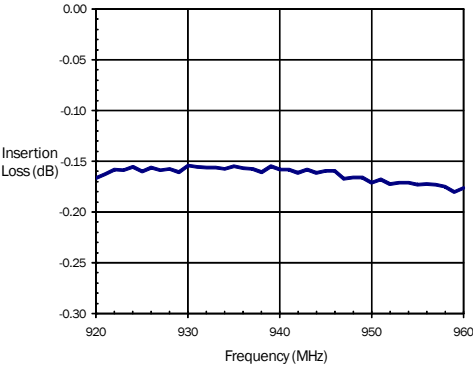
Absolute Maximum Ratings

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

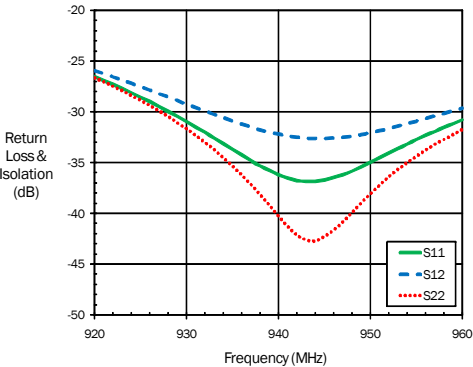
Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	920		960	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	20	>23		dB	
Return Loss	20	>23		dB	
IMD		-70		dBc	2Tx37.0 Watts

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

Typical Insertion Loss



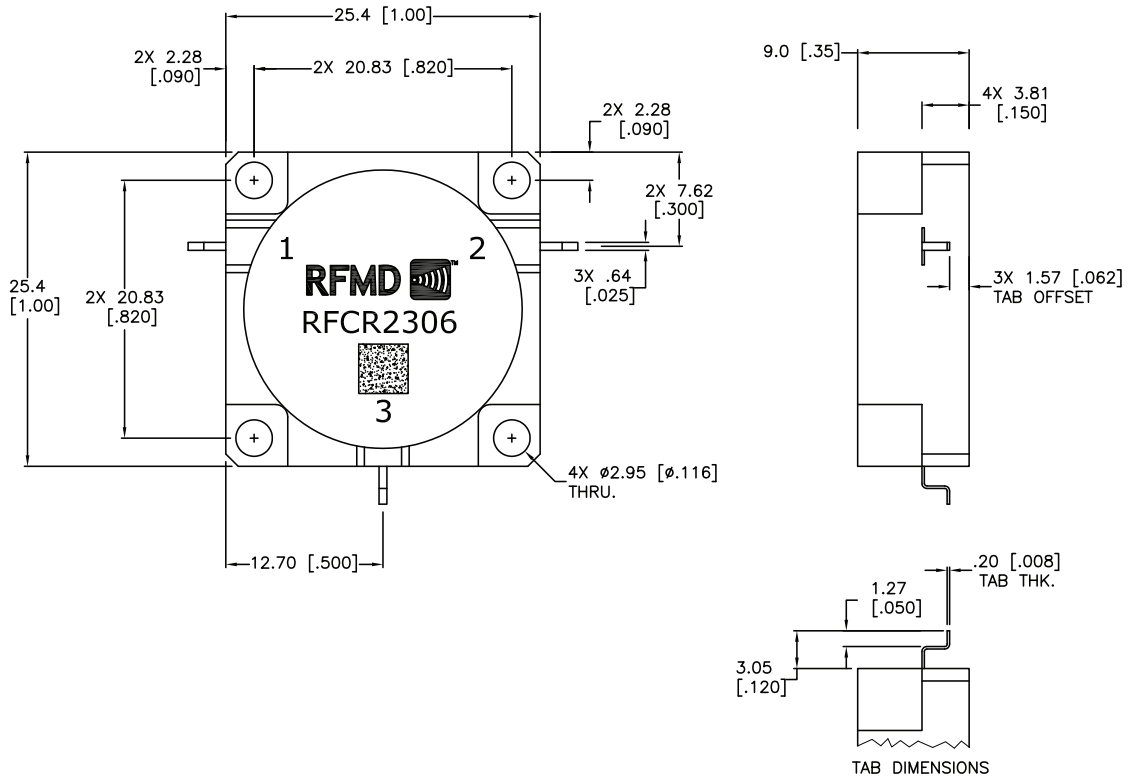
Typical Return Loss and Isolation



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	$.x\pm .3 [.01]$	$\pm 0.5^\circ$
	$.xx\pm .13 [.005]$	