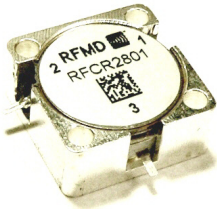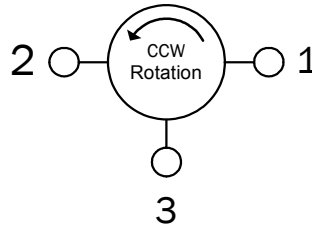**RFMD**))))
rfmd.com

Package: Drop-in, 0.75in x 0.75in

RoHS ✓

Features

- Typical Insertion Loss Less than 0.2 dB
- -75dBc IMD Maximum
- Isolation Greater than 23dB
- 100W Forward and Reverse Rating
- Industry Standard 0.75in x 0.75in Drop-in Package

Applications

- Wireless Infrastructure Systems: 4G (BRS/EBS)

Functional Block Diagram

Product Description

The RFCR2801 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 RFCR2801 circulator is CCW (Counter Clockwise) rotation.

Ordering Information

RFCR2801   2490MHz to 2690MHz Single Junction Drop-In Circulator
RFCR2801PCBA-41X Fully Assembled Evaluation Board

Optimum Technology Matching® Applied

|			
☐ GaAs HBT	☐ SiGe BiCMOS	☐ GaAs pHEMT	☐ GaN HEMT
☐ GaAs MESFET	☐ Si BiCMOS	☐ Si CMOS	☐ BiFET HBT
☐ InGaP HBT	☐ SiGe HBT	☐ Si BJT	☐ LDMOS

7628 Thorndike Road, Greensboro, NC 27409-9421 · For sales or technical support, contact RFMD at (+1) 336-678-5570 or customerservice@rfmd.com

www.BDTIC.com/RFMD

RFCR2801

Absolute Maximum Ratings

Parameter	Rating	Unit
Forward Power (Peak/Average)	100	W
Reverse Power	100	W
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +100	°C

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	2490		2690	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	21	>23		dB	
Return Loss	21	>23		dB	
Forward IMD			-75	dBc	2T at 35 Watts per T 5MHz spacing (dBc), Room temp

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

Typical Insertion Loss

Typical Return Loss and Isolation
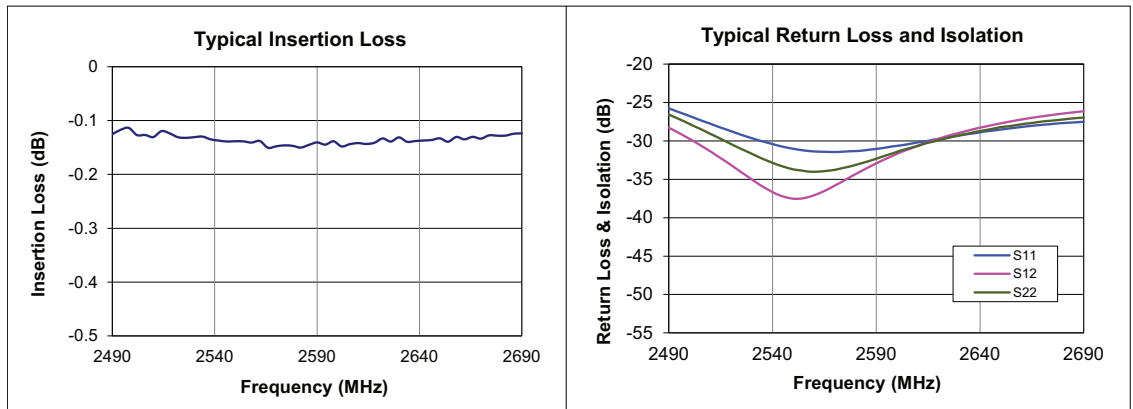
Pin	Name	Description
1	OUTPUT	
2	INPUT	
3	TERMINATED	

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DS120501

Package Drawing

Dimensions in millimeters (inches)
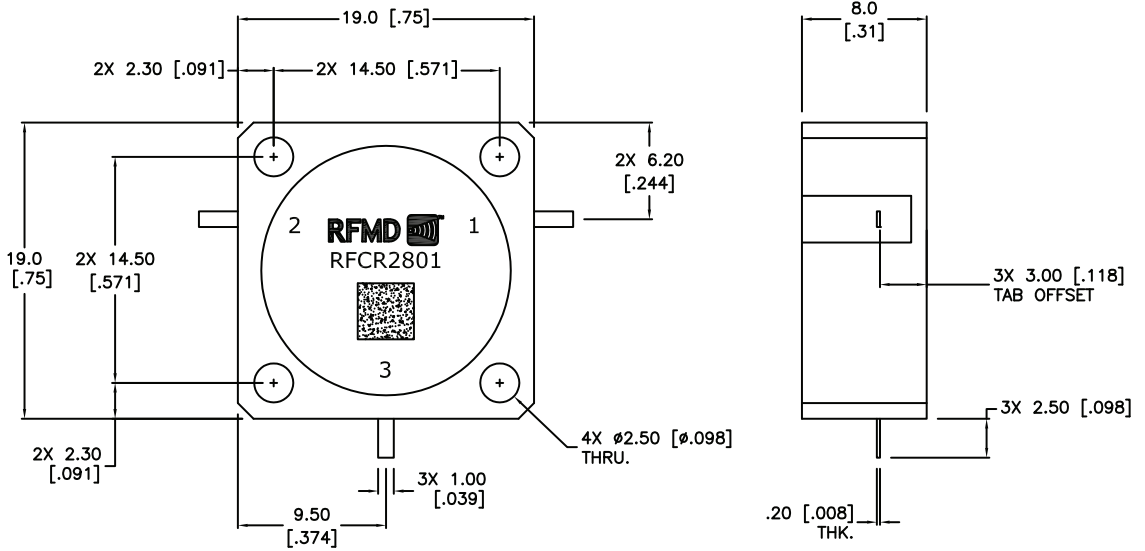
Unless otherwise specified dimensions are in mm/[inches].

Tolerances are:

Fractions	Decimals	Angles
±	.x± .3 [.01]	±0.5°
	.xx± .13 [.005]	