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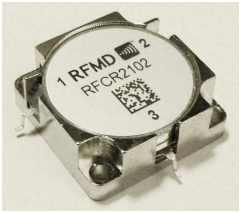
RFCR2102

728MHz TO 756MHz SINGLE JUNCTION DROP-IN CIRCULATOR

Package: Drop-in, 1in x 1 in

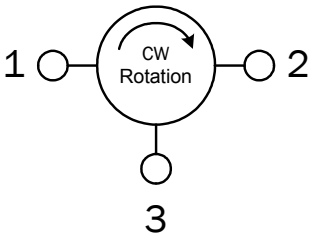


Features

- Typical Insertion Loss Less than 0.2dB
- -70dBc IMD Typical
- Isolation Greater than 23dB
- 250W Forward and Reverse Rating
- Industry Standard 1.0x1.0 Inch Drop-in Package

Applications

- Wireless Infrastructure Systems: LTE network.



Functional Block Diagram

Product Description

The RFCR2102 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 RFCR2102 circulator is CW (Clockwise) rotation.

Ordering Information

RFCR2102	728MHz to 756MHz Single Junction Drop-In Circulator
RFCR2102PCBA-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

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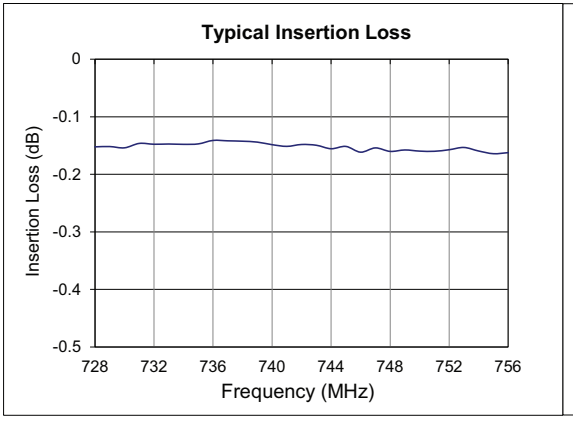
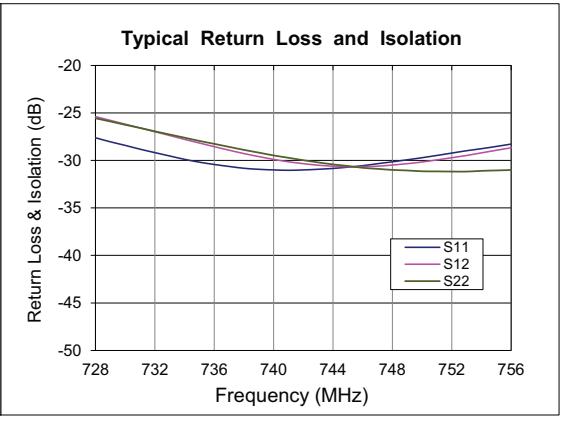
Absolute Maximum Ratings

Parameter	Rating	Unit
Forward Power (Peak/Average)	1000/250	W
Reverse Power	250	W
Operating Temperature	-40 to +125	°C
Storage Temperature	-40 to +125	°C

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	728		756	MHz	
Insertion Loss		<0.20	0.30	dB	
Isolation	20	>23		dB	
Return Loss	20	>23		dB	
Forward IMD		-70		dBc	2T at 37.0 Watts per T 1MHz spacing (dBc)

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





Pin	Name	Description
1	INPUT	
2	OUTPUT	
3	TERMINATED	

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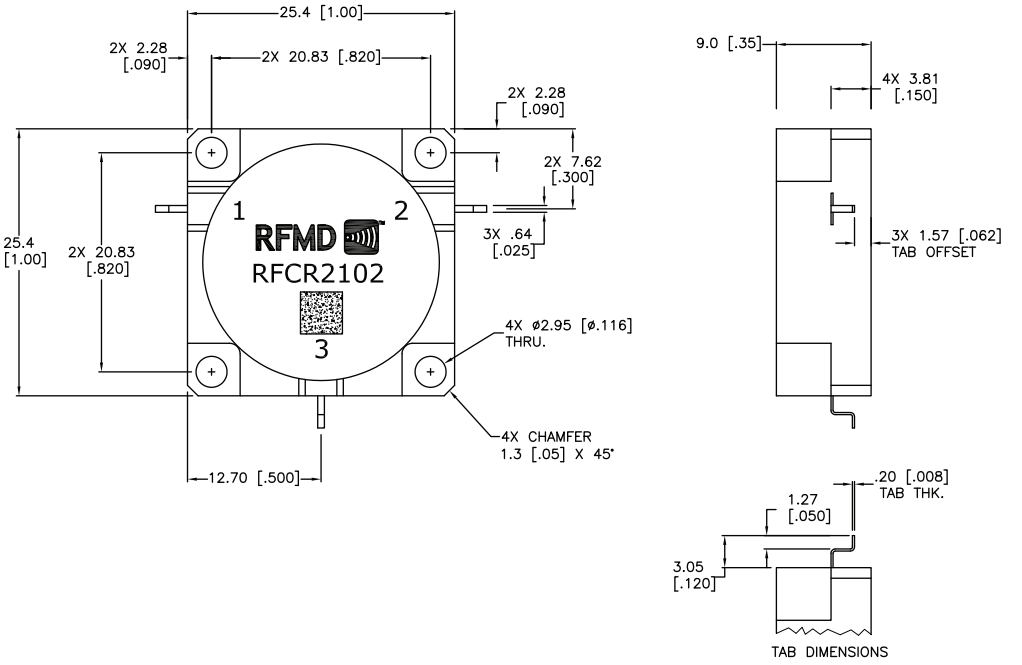
Package Drawing

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]	

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