

SPECIFICATION SHEET

# MAFRIN0532: 1805—1880 MHz Single Junction Drop-in Circulator

## Applications

- Wireless infrastructure

## Features

- Operating frequency range: 1805 to 1880 MHz
- BeO free
- RoHS compliant

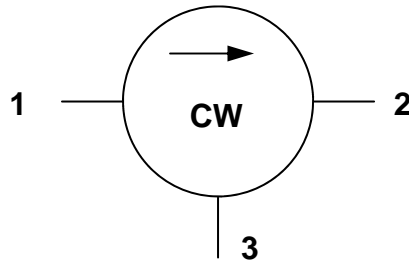
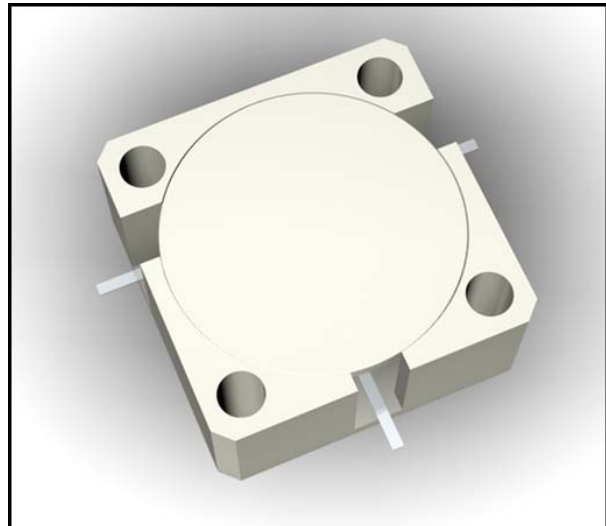


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	$P_{AVG}$			200	W
Peak power	$P_{PK}$			1000	W
Operating temperature range	$T_{OP}$		-30	+85	°C
Storage temperature range	$T_{STOR}$		-40	+100	°C

Note: Exceeding any of the limits listed here may result in permanent damage to the device or may reduce device reliability.

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Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1805		1880	MHz
Impedance				50		$\Omega$
Insertion loss	IL				0.25	dB
Isolation	ISO	-10°C to +85°C	20			dB
Isolation	ISO	-30°C to -10°C	18			dB
Return loss	RL	-10°C to +85°C	21			dB
Return loss	RL	-30°C to -10°C	19			dB
Intermodulation distortion (Note 2)	IMD	2 x 30W CW tones, 5MHz spacing	75			dBc

Note 1: Performance is guaranteed under the conditions listed in this table and over the operating temperature range.

Note 2: See Skyworks Application Note, *Intermodulation Distortion Measurements of Ferrites*, document number 201537 for further details.

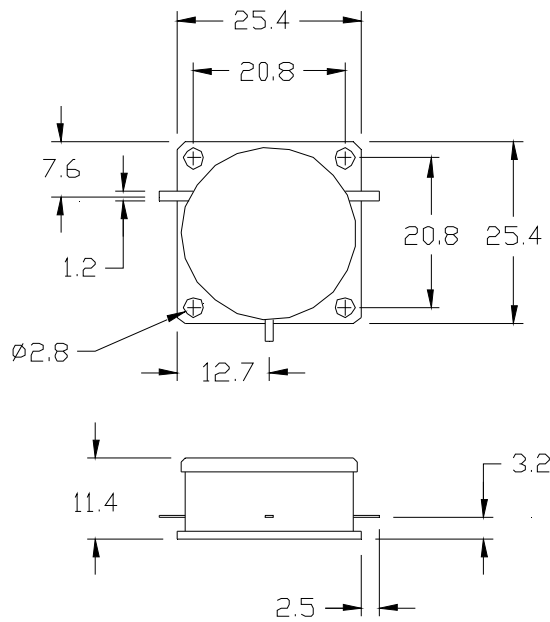
Table 3. Plating Specification

Section	Base Material	Plating
Leads	Copper	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
MAFRIN0532	MAFX-999999-000PPR

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All dimensions in millimeters.  
Tolerance:  $\pm 0.2\text{mm}$  unless otherwise specified.  
Coplanarity specification: 0.1mm maximum.  
Model number, lot code and port designation printed on top side of device.

**Figure 2. Package Dimensions**

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