

MAFRIN0540: 1930-1990 MHz Single Junction Drop In Circulator

Applications

- Wireless Infrastructure
- Power amplifiers

Features

- Operating frequency range: 1930 to 1990 MHz
- BeO free
- RoHS compliant

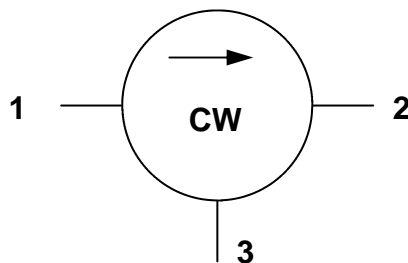
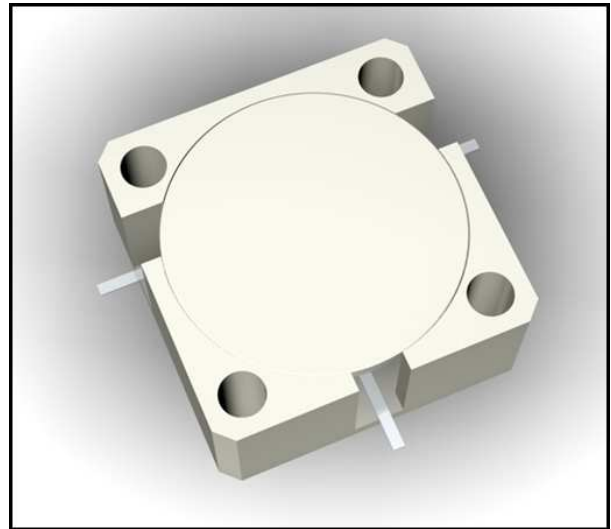


Figure 1. Block Diagram

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}		-55	+125	°C

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

Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1930		1990	MHz
Impedance				50		Ω
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
Isolation	ISO	-30°C to -10°C	19			dB
Third order IMD	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.

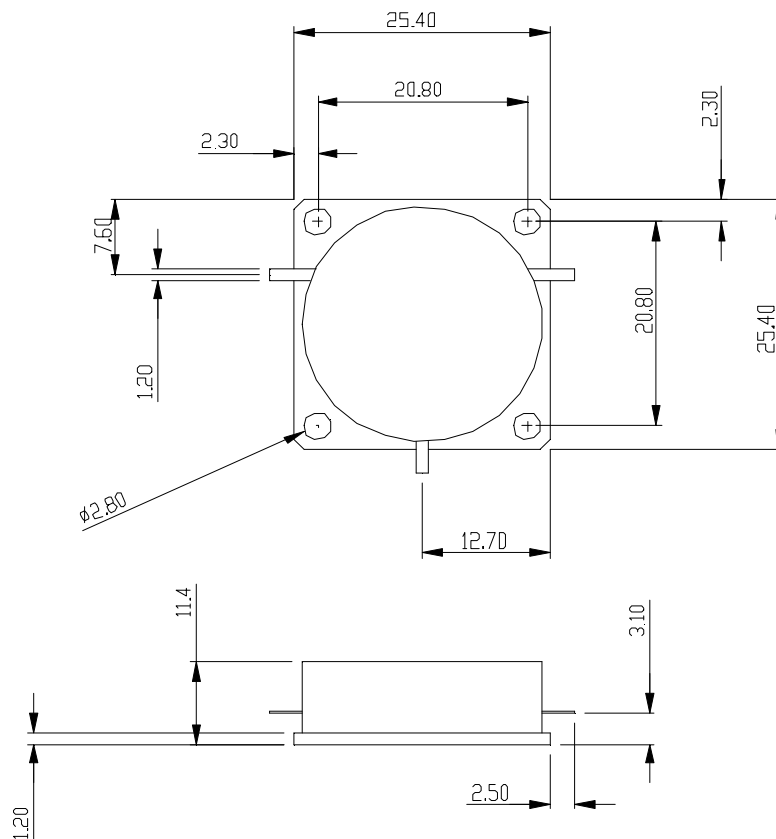
Table 3. Plating Specification

Section	Base Material	Plating
Leads	Copper	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
MAFRIN-0540	TFX-00036-31

SPECIFICATION SHEET • MAFRIN0540



All dimensions in millimeters.

Tolerance: $\pm 0.2\text{mm}$ unless otherwise specified.

Lead thickness is 0.12mm.

Model number, lot code and port designation printed on top side of device.

Figure 2. Package Dimensions

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