

# MAFRIN0496: 950—956 MHz Single Junction Circulator

## Applications

- Wireless infrastructure
- Power amplifiers



## Features

- Small surface mount package
- Operating frequency range: 950 to 956 MHz
- BeO free
- RoHS compliant

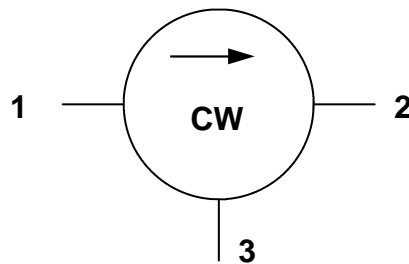


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	$P_{AVG}$			100	W
Peak power	$P_{PK}$			500	W
Operating temperature range	$T_{OP}$		-10	+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.

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**Table 2. Electrical Specifications (Note 1)**

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		950		956	MHz
Impedance				50		$\Omega$
Insertion loss	IL				0.25	dB
Isolation	ISO		23			dB
Return loss	RL		23			dB

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

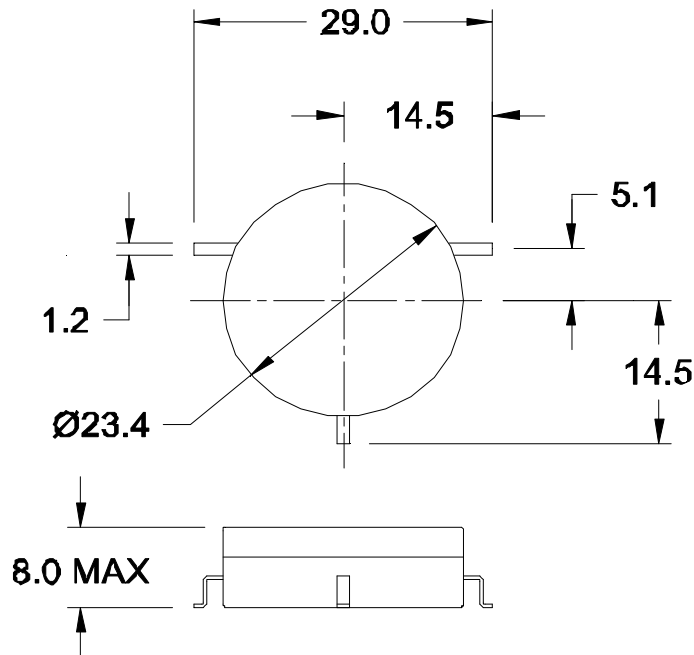
**Table 3. Plating Specification**

Section	Base Material	Plating
Leads	Copper	Silver
Housing	Steel	Tin

**Table 4. Ordering Information**

Manufacturing Part Number	Evaluation Board Part Number
MAFRIN0496	MAFX-999999-000001

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All dimensions in millimeters.  
Tolerance:  $\pm 0.2\text{mm}$  unless otherwise specified.  
Coplanarity specification: 0.1mm maximum.  
Lead thickness is 0.12mm.  
Model number, lot code and port designation printed on top side of device.

**Figure 2. Package Dimensions and Recommended PCB Layout**

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