### MAFRIN0512



## Single Junction Drop-In Circulator 925 MHz—960 MHz

Rev. C

### **Applications**

- ♦ Wireless Infrastructure
- ♦ GSM

#### **Features**

- ♦ RoHS Compliant
- ♦ BeO free

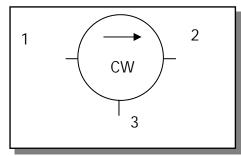
### **Electrical Specifications**

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	925		960
Impedance		Ω		50	
Insertion Loss		dB			0.25
Isolation	-10°C to +85°C	dB	20		
Isolation	-30°C to -10°C	dB	18		
Return Loss	-10°C to +85°C	dB	21		
Return Loss	-30°C to −10°C	dB	19		
Third Order Intermodulation <sup>2</sup>	2 x 30W CW tones, 5MHz spacing	dBc		-75	

- 1. All specifications guaranteed over the operating temperature range unless otherwise stated.
- 2. See Application Note ANI-001 for further details.

### **Functional Block Diagram**

# Pin Configuration Terminal Designation Function 1 Port 1 In 2 Port 2 Out 3 Port 3 Out



### **Absolute Maximum Ratings**

Parameter	Conditions	Units	Min	Max
Input Power		W		1000
Reverse Power		W		500
Operating Temperature Range		°C	-30	+85
Storage Temperature Range		°C	-55	+125

### **Application Notes Available**

Application Note	Description
ANI-001	IMD Measurement of Ferrite Isolators and Circulators
ANI-003	Maximum Peak Power of Ferrite Junctions
ANI-004	Base Plate Temperature of Ferrite Isolators and Circulators
ANI-007	Reflow Soldering Guidelines
ANI-008	Curie Temperature of Isolators and Circulators
ANI-009	Tape and Reel Information for Isolators and Circulators

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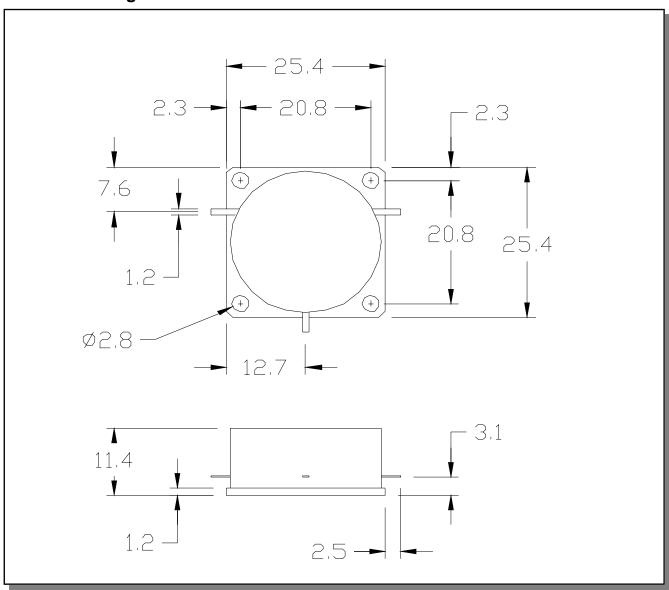
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### **Outline Drawing**



- 1. Dimensions in mm.
- Tolerance: ±0.2mm unless otherwise noted.
- Lead thickness is 0.12mm.
- Model number, lot code and port designation printed on top side of unit.

### **Plating**

Section	Material	Plating
Leads	Copper	Silver
Housing	Steel	Silver

### **ECO History**

Rev	Date	Description	Ву
С	16/9/2009	Update to new format	ВН

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