

Single Junction Drop-In Circulator 1930 MHz—1990 MHz

Rev. B

Applications

- ◆ Wireless Infrastructure
- ◆ PCS

Features

- ◆ RoHS Compliant
- ◆ BeO free

Electrical Specifications

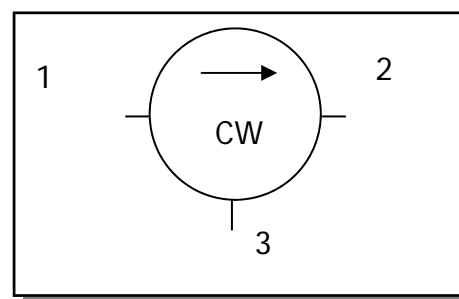
Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	1930		1990
Impedance		Ω		50	
Insertion Loss		dB			0.25
Isolation	-10°C to +85°C	dB	20		
Isolation	-30°C to -10°C	dB	18		
Return Loss	-10°C to +85°C	dB	21		
Return Loss	-30°C to -10°C	dB	19		
Third Order Intermodulation ²	2 x 30W CW tones, 5MHz spacing	dBc		-75	

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

Pin Configuration

Terminal	Designation	Function
1	Port 1	In
2	Port 2	Out
3	Port 3	Out

Functional Block Diagram



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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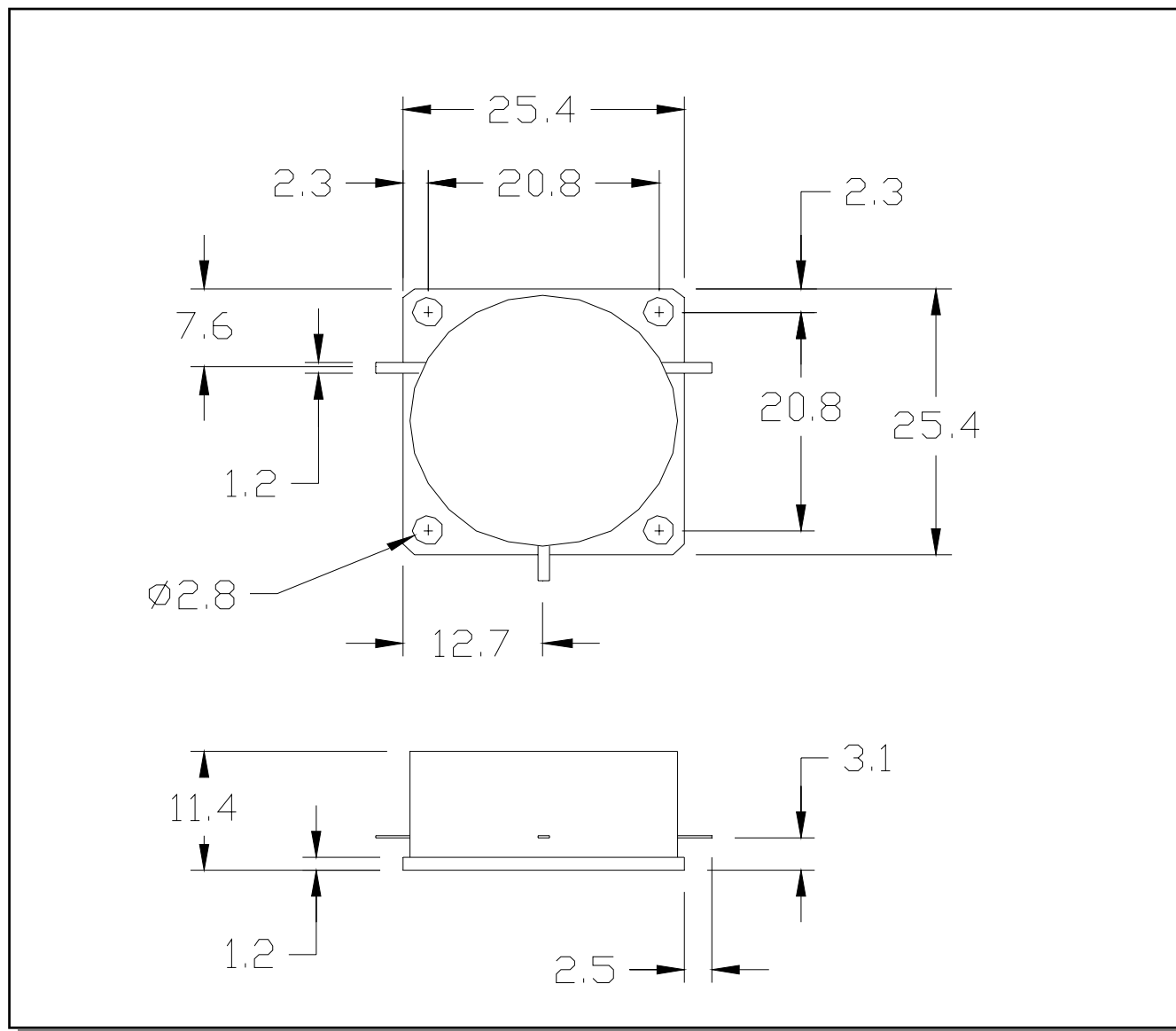
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Outline Drawing



1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Lead thickness is 0.12mm.
4. 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	By
A	16/9/2009	Update to new format	BH
B	22/09/2009	Update application notes	DAC