



Circulator with 13 dB Isolation from 3.3 GHz to 3.8 GHz, 50 Watts and SMA Female

Circulators Technical Data Sheet

RC-AMAJJJ-0330-0380-01

Features

- Forward/Reverse Power 50Watts
- Frequency Range of 3.3 to 3.8 GHz
- Female SMA Connectors
- LOW VSWR

Applications

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

Description

The RC-AMAJJJ-0330-0380-01 is a circulator offering a forward and reverse power rating of 50 Watts at an operational frequency band of 3.3 to 3.8 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 18 dB of isolation.

ZOMWAVE offers a wide array of circulators to meet your specific requirements. These unique devices enable two signals to travel in opposite directions along a single channel. A classic application is at the antenna-transceiver interface: signal flow follows a clockwise path from the antenna (Port 1) to the receiver (Port 2), and then from the transmitter (Port 3) back to the antenna (Port 1). By terminating one port with a matched load, the circulator can also function as an isolator. These components are suitable for radar transmit/receive modules, amplifier systems, and any scenario that requires isolation from signal reflections or bidirectional communication over a shared line. Our circulators deliver excellent performance with low insertion loss, high isolation, and proven reliability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.3		3.8	GHz
Impedance		50		Ohms
Insertion Loss			0.5	dB
Isolation	18			dB
VSWR			1.30:1	
Forward Power, CW			50	Watts
Reverse Power, CW			50	Watts

Electrical Specification Notes:

Average Power and Actuating Current values at 25°C.

Mechanical Specifications

Size

Length	0.98 in [25 mm]
Width	1.10 in [28 mm]
Height	0.59 in [15 mm]
Weight	0.22 lbs [100 g]



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Configuration

Design	Single Junction
Connector 1	SMA Female
Connector 2	SMA Female
Connector 3	SMA Female

Environmental Specifications

Temperature

Operating Range	-30 to +70 deg C
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Notes:

Values at 25° C, sea level.

Compliance Certifications

RoHS Compliant
REACH Compliant

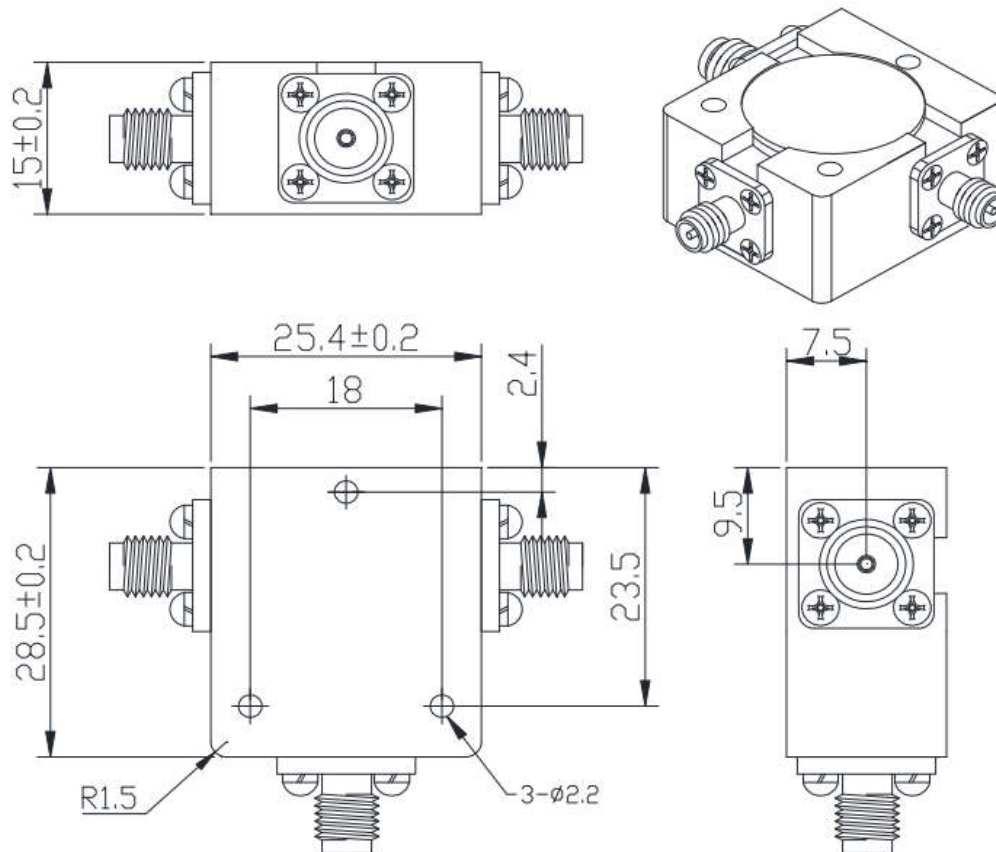
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CAD Drawing



1. Dimensions are in mm [inches]
2. Tolerances: Outline drawing ± 0.2 [0.008] Hole ± 0.2 [0.008]