



High Power Circulator with 16 dB Isolation from 690 MHz to 1000 MHz, 100 Watts and SMA Female

Circulators Technical Data Sheet

RC-AMAJJJ-0069-0100-01

Features

- Forward/Reverse Power 100 Watts
- Frequency Range of 690 to 1000 MHz
- 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-0069-0100-01 is a high power circulator offering a forward and reverse power rating of 100 Watts at an operational frequency band of 690 to 1000 MHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 16 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	690		1000	MHz
Impedance		50		Ohms
Insertion Loss			0.7	dB
Isolation	16			dB
VSWR			1.40:1	
Forward Power, CW			100	Watts
Reverse Power, CW			100	Watts

Electrical Specification Notes:

Average Power and Actuating Current values at 25°C.

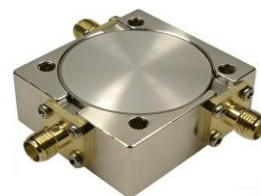
Mechanical Specifications

Size

Length	1.77 in [45 mm]
Width	1.92 in [49 mm]
Height	0.70 in [18 mm]
Weight	0.63 lbs [290 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

-40 to +70 deg C

Notes:

Values at 25° C, sea level.

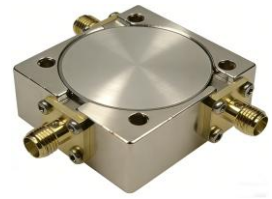
Compliance Certifications

RoHS Compliant

REACH Compliant

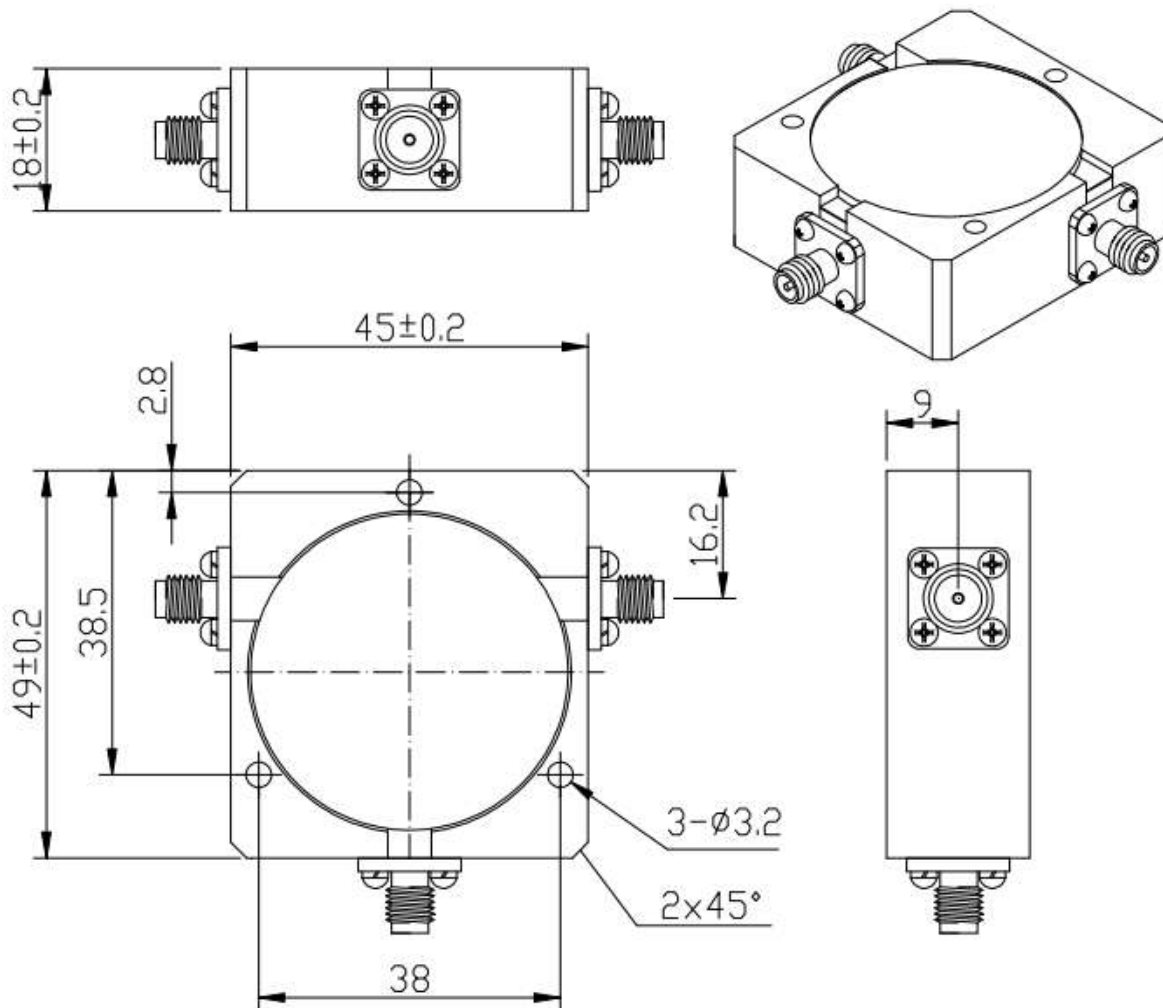
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CAD Drawing



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