



Circulator with 13 dB Isolation from 0.8 GHz to 2 GHz, 50 Watts and SMA Female

Circulators Technical Data Sheet

RC-AMAJJJ-0080-0200-01

Features

- Forward/Reverse Power 50Watts
- Frequency Range of 0.8 to 2 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-0080-0200-01 is a circulator offering a forward and reverse power rating of 50 Watts at an operational frequency band of 0.8 to 2 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 13 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	0.8		2	GHz
Impedance		50		Ohms
Insertion Loss			1.3	dB
Isolation	13			dB
VSWR			1.60:1	
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	1.96 in [50 mm]
Width	1.96 in [50 mm]
Height	0.86 in [22 mm]
Weight	0.70 lbs [320 g]



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

Environmental Specifications

Temperature

Operating Range	0 to +60 deg C
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Notes:

Values at 25° C, sea level.

Compliance Certifications

RoHS Compliant
REACH Compliant

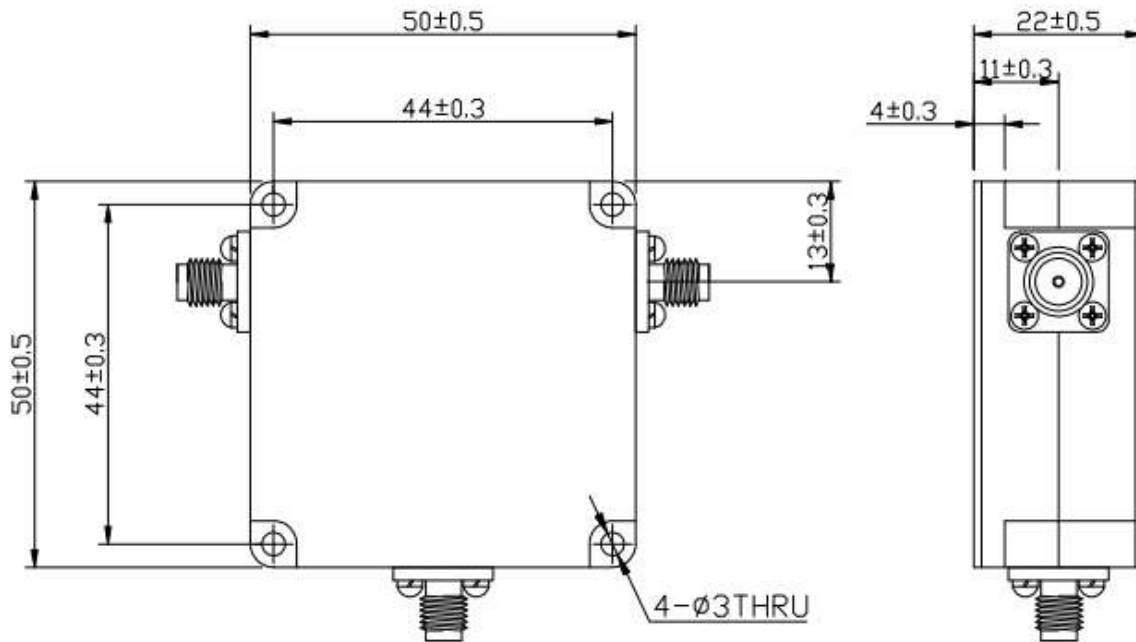
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CAD Drawing



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