

WR28 Waveguide Isolator 26.5GHz-40GHz

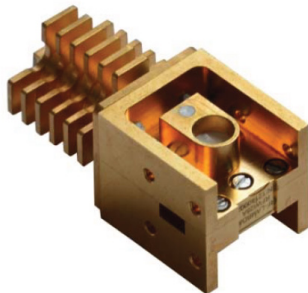


Photo is for illustration purposes only.
Please refer to the outline drawing.

Product Description

RFWI28A is a WR28 waveguide isolator with a frequency range of 26.5 to 40GHz.

The isolator has a typical isolation of 16dB. The maximum insertion loss is 0.6dB.

The isolator interface is WR28.

Features

- High power handling up to 15W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications ($T_A=+25^{\circ}\text{C}$)

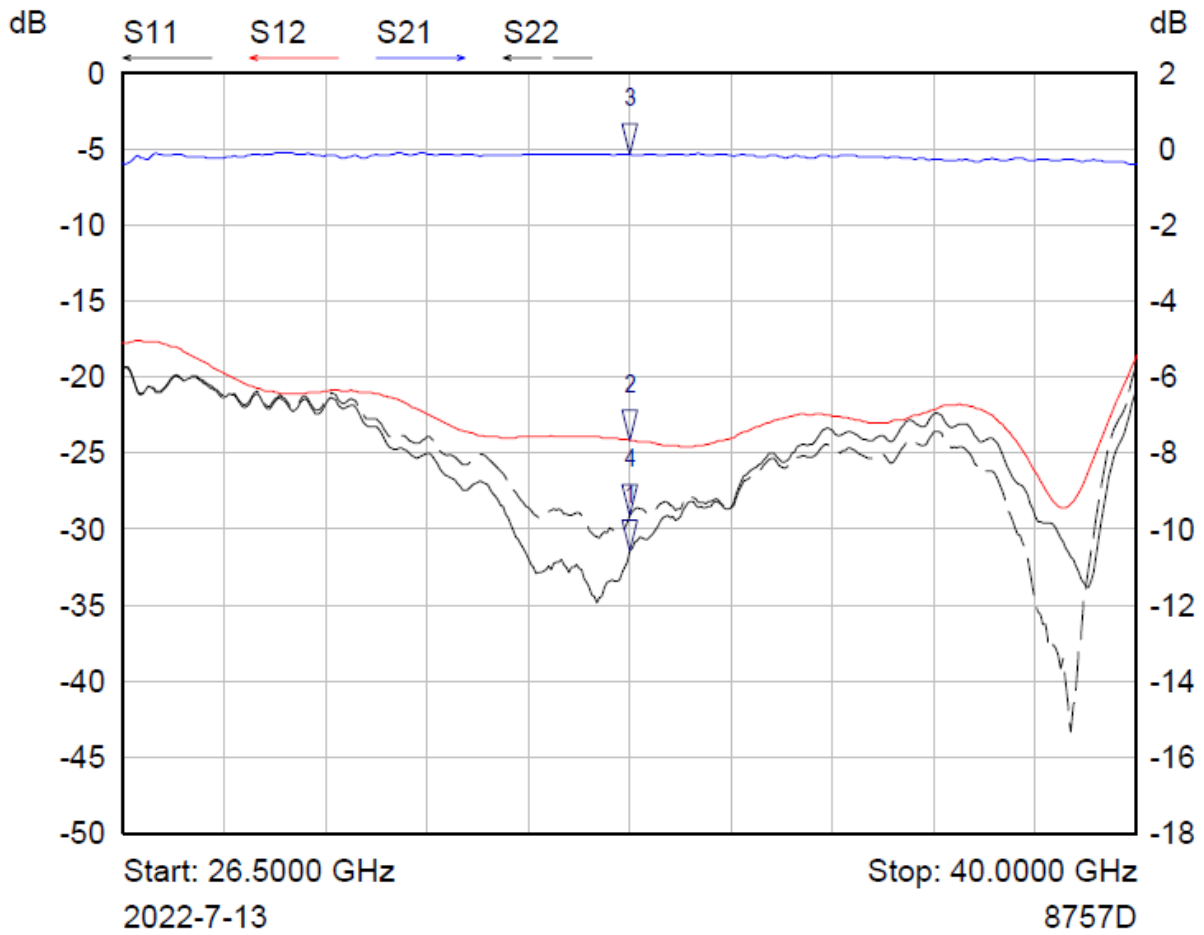
Parameter	Min.	Typ.	Max.	Units
Frequency Range		26.5-40		GHz
Insertion Loss			0.60	dB
Isolation	16			dB
VSWR			1.38	:1
Forward Power (CW)			15	W
Reverse Power (CW)			15	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Input / Output Connectors		COVER flat 4 holes		
Interface		WR28		
Flange Type		UG599/U		
Weight		-		lbs

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°C to +60°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

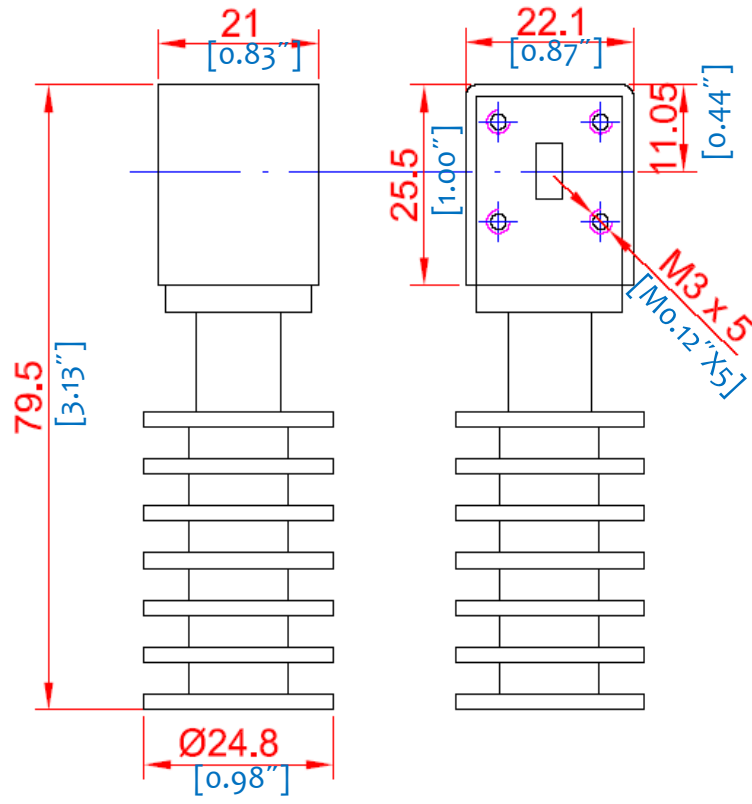
**For vibration testing details please see additional information section.

Typical Performance Plots



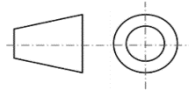
Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	33.2500 GHz	-31.41 dB	
2 ▾	S12	33.2500 GHz	-24.13 dB	
3 ▾	S21	33.2500 GHz	-0.15 dB	
4 ▾	S22	33.2500 GHz	-29.12 dB	

Outline Drawing



Notes:

1. Package Material: Aluminum alloy
2. Finish : **conductive oxide**
3. All dimensions are in millimeters [inches]
4. Outline Tolerances ± 0.5 [0.02], Mounting Hole Tolerances ± 0.2 [0.008] unless otherwise specified.



Additional Information

Documentation	Webpage
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFWI28A	WR28	26.5-40GHz Waveguide Isolator

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