WR28 Waveguide Isolator
27GHz-32GHz

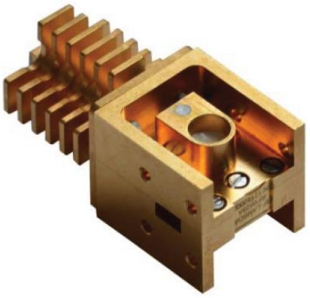


Photo is for illustration purposes only.
Please refer to the outline drawing.

Product Description

RFWI28A27G32G is a WR28 waveguide isolator with a frequency range of 27 to 32GHz.

The isolator has a minimum isolation of 19dB. The maximum insertion loss is 0.45dB.

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=+25ºC)

Parameter	Min.	Typ.	Max.	Units
Frequency Range		27 - 32		GHz
Insertion Loss			0.45	dB
Isolation	19			dB
VSWR			1.25	:1
Forward Power (CW)			15	W
Reverse Power (CW)			15	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Waveguide type		Rectangular Waveguide WR28		
Flange type		COVER		
Flange Holes		Through (As shown)		

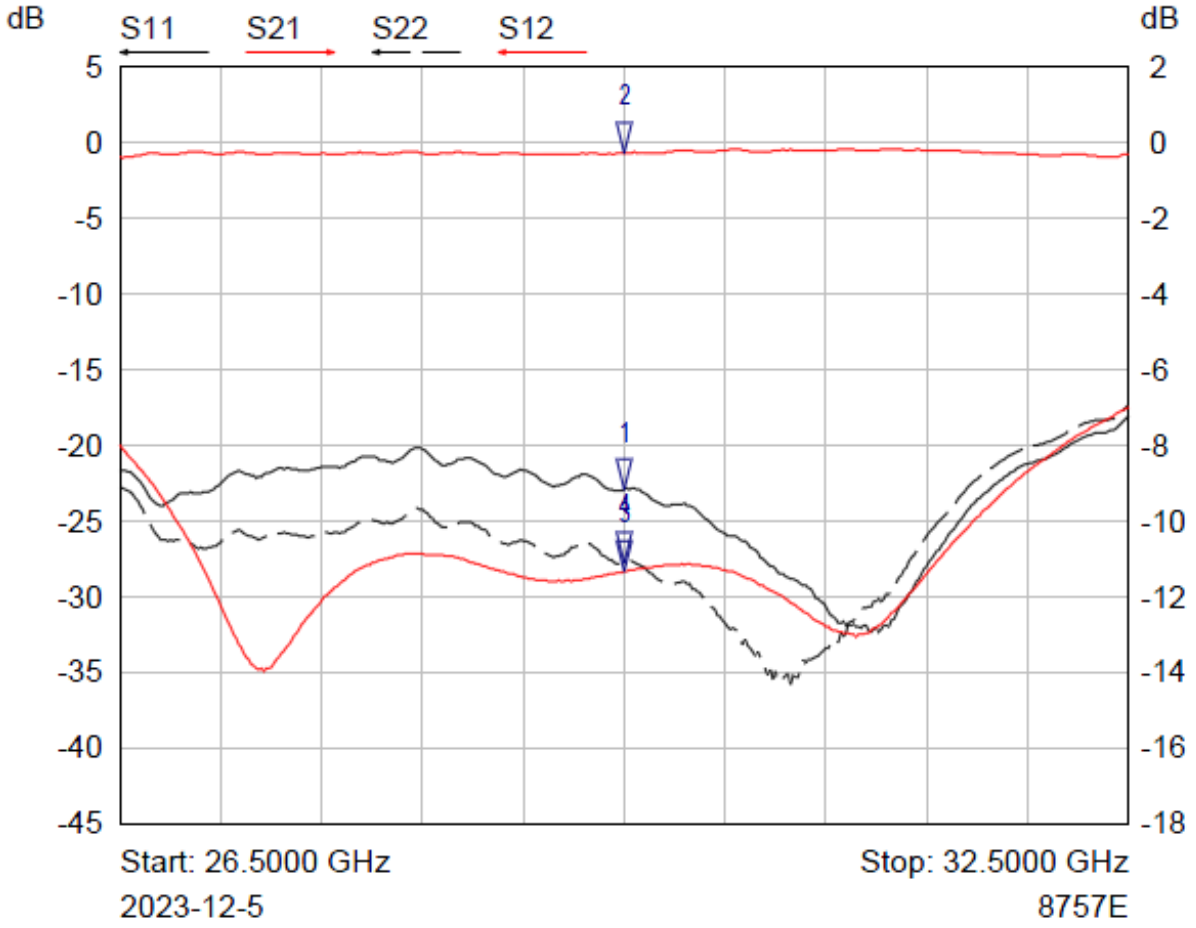
RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-32ºC to +63ºC (Case Temperature)
Storage Temperature	-50ºC to +125ºC
Thermal Shock	-40ºC → +85ºC (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)

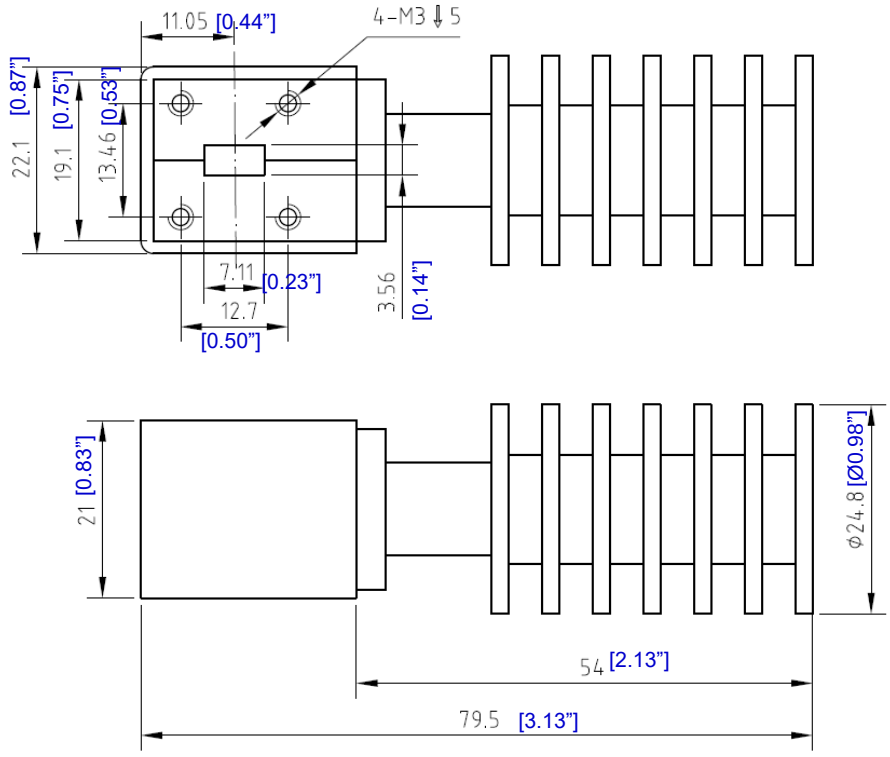
**For vibration testing details please see additional information section.

Typical Performance Plots

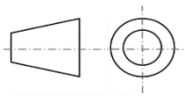


Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	29.5000 GHz	-22.90 dB	
2 ▽	S21	29.5000 GHz	-0.27 dB	
3 ▽	S12	29.5000 GHz	-28.33 dB	
4 ▽	S22	29.5000 GHz	-27.71 dB	

Outline Drawing



Notes:
1. Basis-material : Aluminum
2. External Body Finish : Body painted with gray/black epoxy enamel
3. All dimensions are in millimeters [inches]



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
RFWI28A27G32G	WR28	27GHz - 32GHz Waveguide Isolator

Important Notice

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com