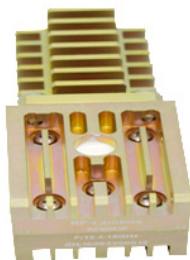


15W WR28 Waveguide Isolator 26.5 - 40GHz



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

Product Description

RFWI28C is a WR28 waveguide isolator with a frequency range of 26.5 to 40GHz.

The isolator has a typical isolation of 17dB. The maximum insertion loss is 0.6dB.

The isolator waveguide type is WR28.

Features

- High power handling capability up to 15 W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature

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

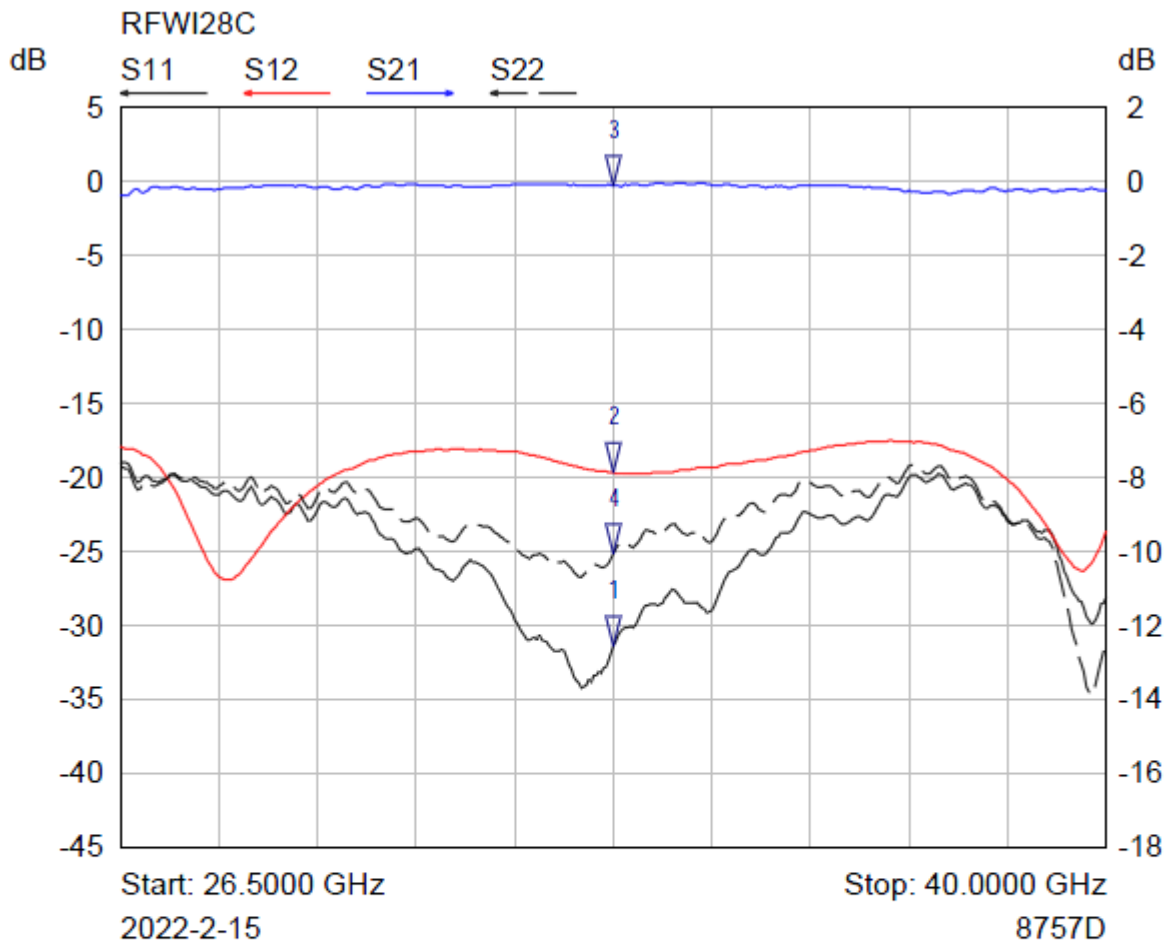
Parameter	Min	Typ	Max	Units
Frequency Range		26.5-40		GHz
Insertion Loss		0.5	0.6	dB
Reverse Isolation (Note 1)	17			dB
VSWR		1.25	1.35	:1
Forward Power (CW)			15	W
Reverse Power (CW)			2	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Input / Output Interface		COVER flat 4 holes		
Finish		conductive oxide		
Flange Type		UG599/U		

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°C to +60°C (Case Temperature)
Storage Temperature	-45°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.

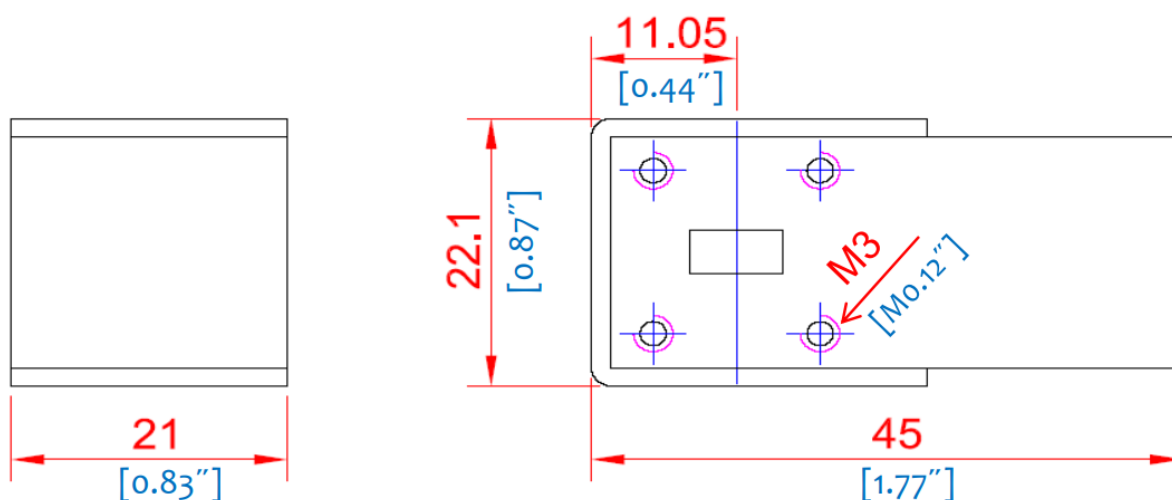
Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	33.2500 GHz	-31.38 dB	
2 ▽	S12	33.2500 GHz	-19.70 dB	
3 ▽	S21	33.2500 GHz	-0.10 dB	
4 ▽	S22	33.2500 GHz	-25.16 dB	

SN:220206

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy
2. All dimensions are in millimeters [inches]
3. Tolerance $\pm 0.25(0.01)$, unless otherwise specified.

Additional Information

Documentation

Connector Torque Specifications

Webpage

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
RFWI28C	Waveguide Type WR28	26.5GHz-40GHz Waveguide Isolator

Important Notice

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