



# RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFWI28C

## 15W WR28 Waveguide Isolator 26.5 - 40GHz



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



### Features

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

### Typical Applications

- Aerospace and military applications
- Wireless Infrastructure
- Test and Measurement

### Electrical Specifications, $T_A=25\text{ }^{\circ}\text{C}$

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			
Case Material	Aluminum Alloy			
Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss Bandwidth (5 ~10) % x Center Frequency (Isolation >19dB) Bandwidth (20~30) % x Center Frequency (Isolation >18dB) Bandwidth (40~60) % x Center Frequency (Isolation >17dB) Ask manufacturer for details				

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### Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+60°C
Storage Temperature		-45°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
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	MIL-STD-883	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)

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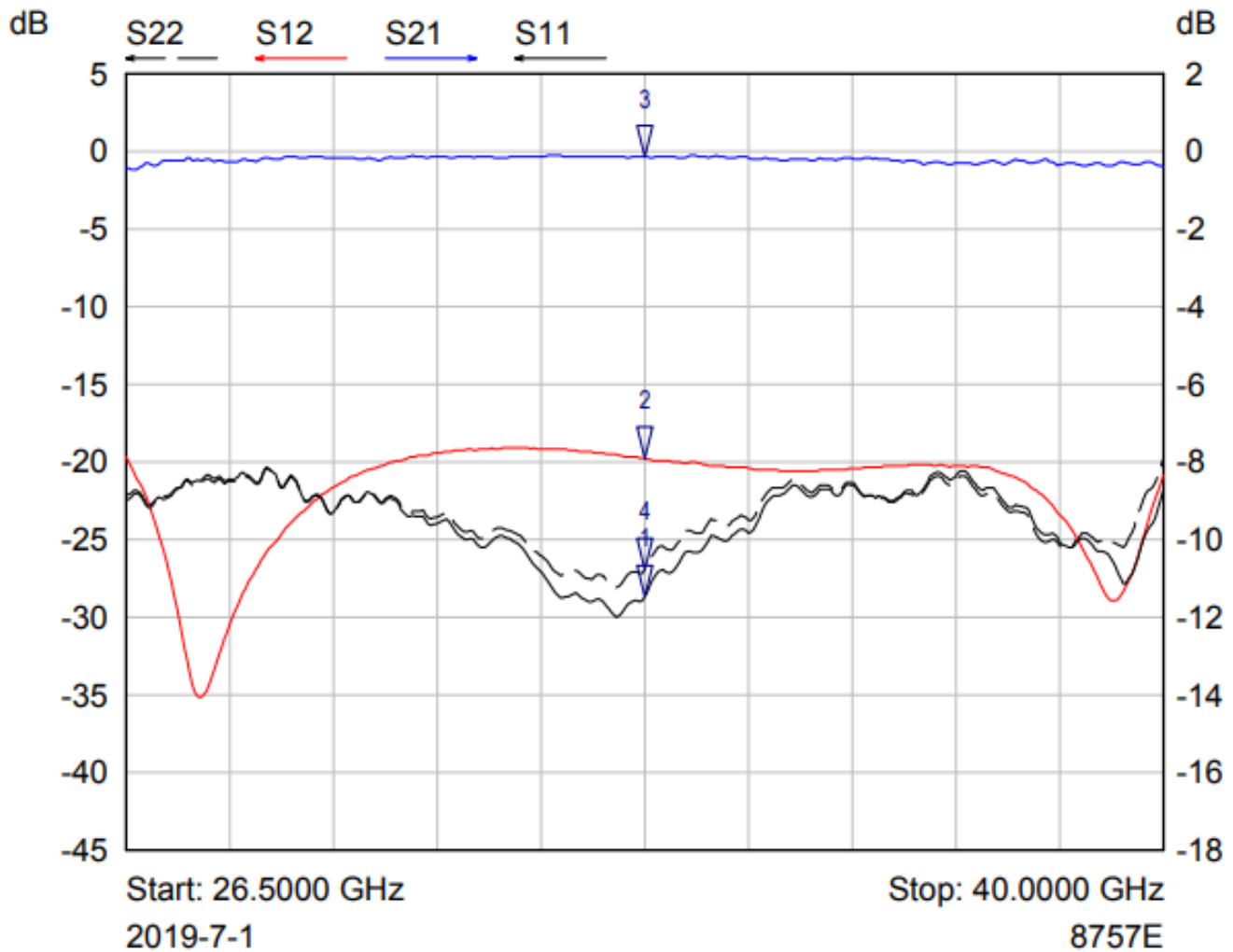


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### Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	33.2500 GHz	-28.71 dB	
2 ▽	S12	33.2500 GHz	-19.76 dB	
3 ▽	S21	33.2500 GHz	-0.13 dB	
4 ▽	S22	33.2500 GHz	-26.94 dB	

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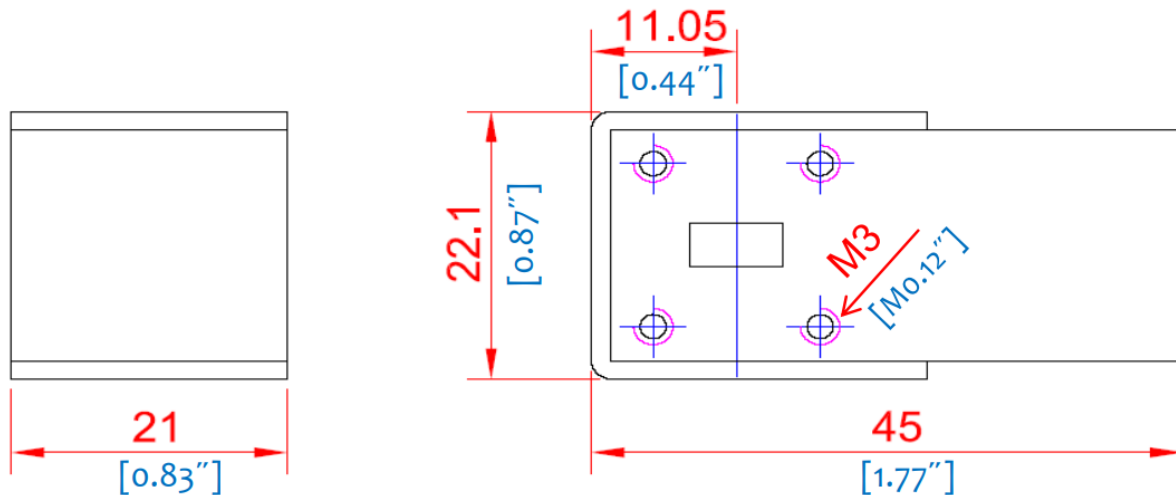
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### Outline Drawing:

All Dimensions in mm [inches]



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### Important Notice

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