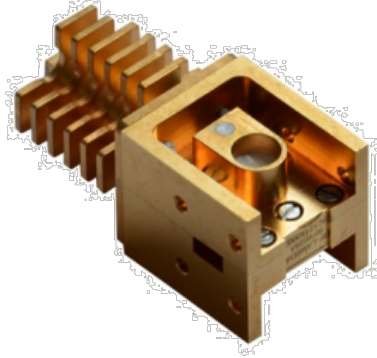


## WR90 Waveguide Isolator 8.2 - 12.4GHz



### Features

- High power handling capability up to 75W
- Wide band operation
- High isolation within operational band
- Low Insertion loss

### Typical Applications

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

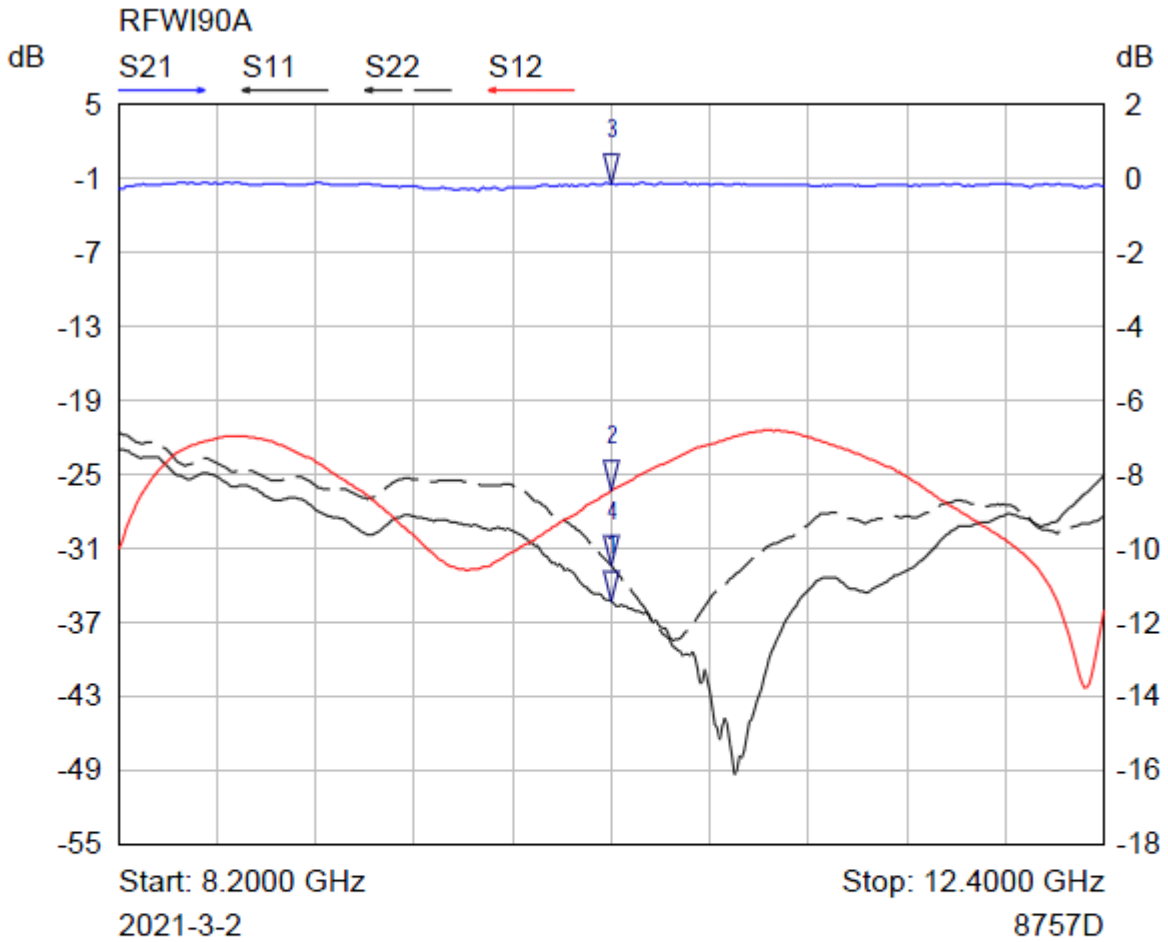
### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min	Typ.	Max	Units
Frequency Range	8.2-12.4			GHz
Insertion Loss			0.50	dB
Isolation	19			dB
VSWR			1.25	:1
Forward Power (CW)			75	W
Reverse Power (CW)			7.5	W
Rotation	Clockwise (Standard, the port 3 is a load) Counter Clockwise (upon request)			
Finish	Oxidation			
Flange Type	UG135/U			
Case Material	Aluminum Alloy			
Weight		-		ounces
Impedance		-		$\Omega$

*Environmental Specifications and Test Standards*

Parameter	Description
Operational Temperature	-20°C~+60°C (Case Temperature less than +75°C)
Storage Temperature	-45°C~+85°C
Thermal Shock	-20°C → +60°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +75°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	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)

Typical Performance Plots



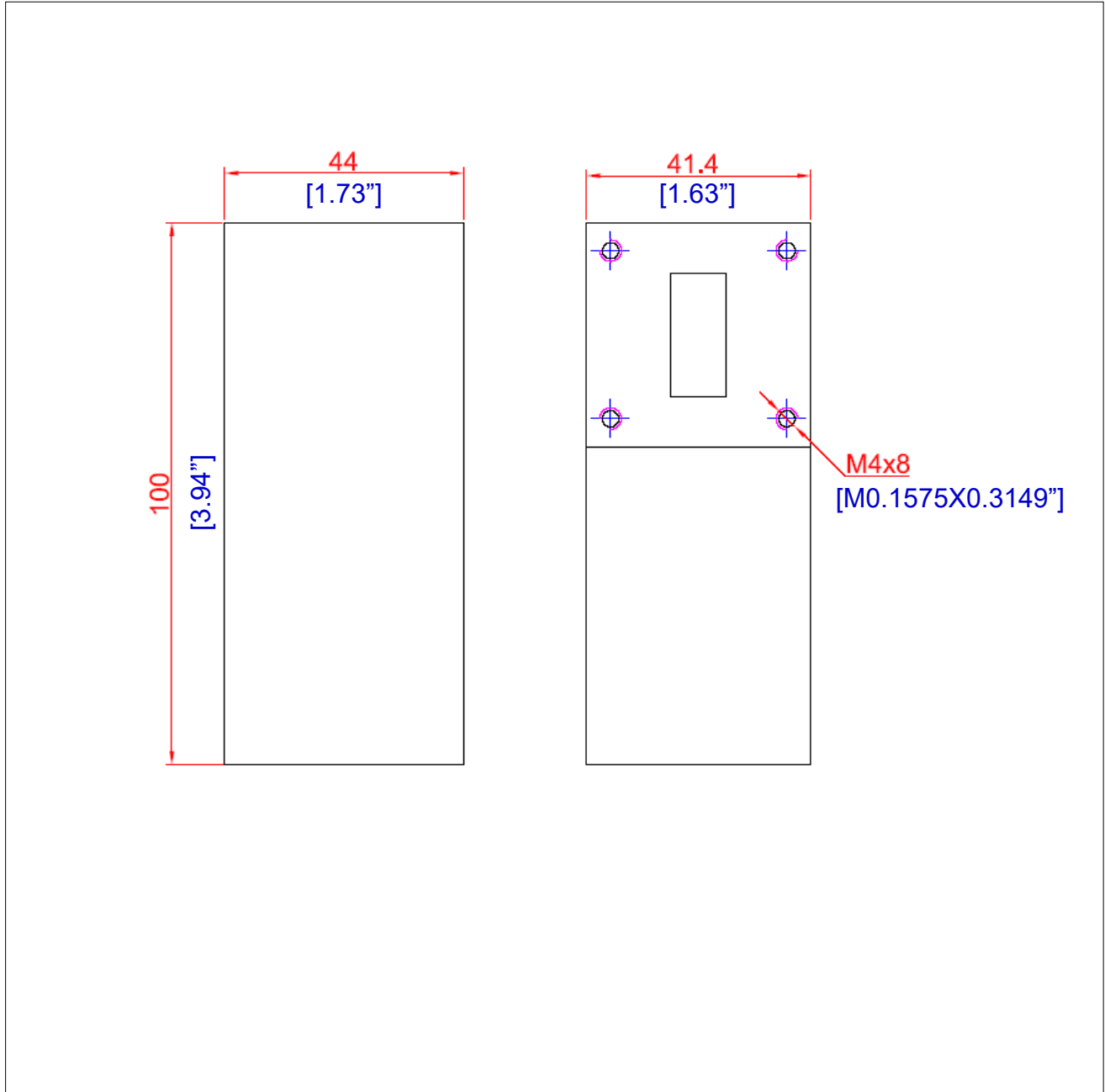
Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	10.3000 GHz	-35.35 dB	
2 ▾	S12	10.3000 GHz	-26.34 dB	
3 ▾	S21	10.3000 GHz	-0.15 dB	
4 ▾	S22	10.3000 GHz	-32.44 dB	

SN:20210304

**75W WR90 Waveguide Isolator 8.2 - 12.4GHz**

**Outline Drawing:**

All Dimensions in mm [inches]



**75W WR90 Waveguide Isolator 8.2 - 12.4GHz**

**Important Notice**

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