



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFWI90A

75W 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
- 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	8.2-12.4			GHz
Insertion Loss			0.50	dB
Reverse Isolation (Note 1)	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	-			Ω

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss
Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB)
Bandwidth (20~30) % x Center Frequency (Isolation >21dB)
Bandwidth (40~60) % x Center Frequency (Isolation >20dB)
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		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)



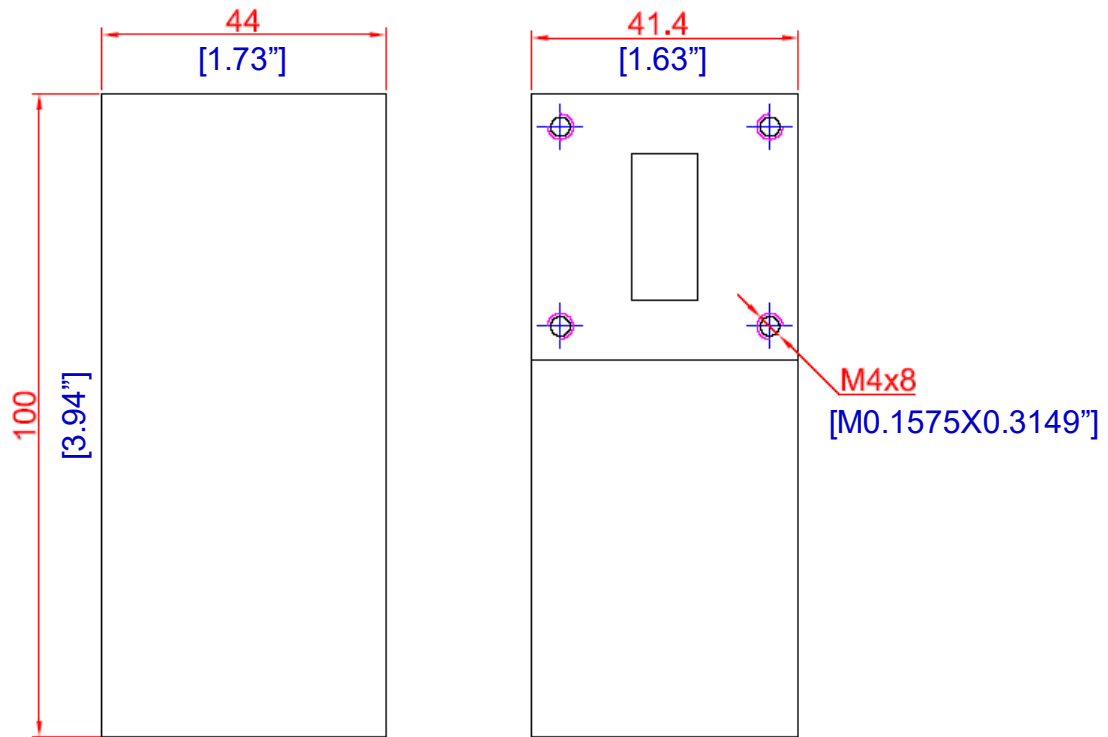
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Outline Drawing:

All Dimensions in mm [inches]



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