Waveguide WR75 Directional Coupler
10 – 15GHz

RoHS Compliant

Features

- Compact Package
- 3-Port Directional Coupler
- Other Frequency Ranges available.

Typical Applications

- Aerospace and military applications
- Test and Measurement
- Research and Development

Electrical Specifications, T_A=25 ℃

Parameter	Min.	Typ.	Max.	Min	Typ	Max	Units
Frequency Range	10		14.5	14.5		15	GHz
Directivity	35					35	dB
Insertion Loss			0.2			0.3	dB
VSWR Primary			1.08			1.3	:1
VSWR Secondary			1.30			1.30	:1
Coupling	19	20	21	18	20	21	dB
Power Handling(CW)	200						W
Waveguide Type	Rectangular Waveguide WR75						
Flange Type	UBR120						
Flange Holes	Through						
Basis-material	Alloyed Aluminum						
External Body Finish	Body painted with gray / Black epoxy enamel						

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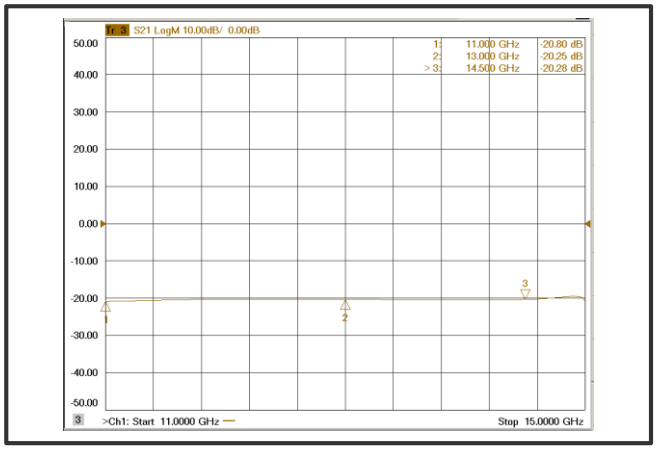
Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-54℃~+71℃
Storage Temperature		-60℃~+125℃
Thermal Shock		1 Hour@ -45℃ → 1 Hour @ +85℃ (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85℃ 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)

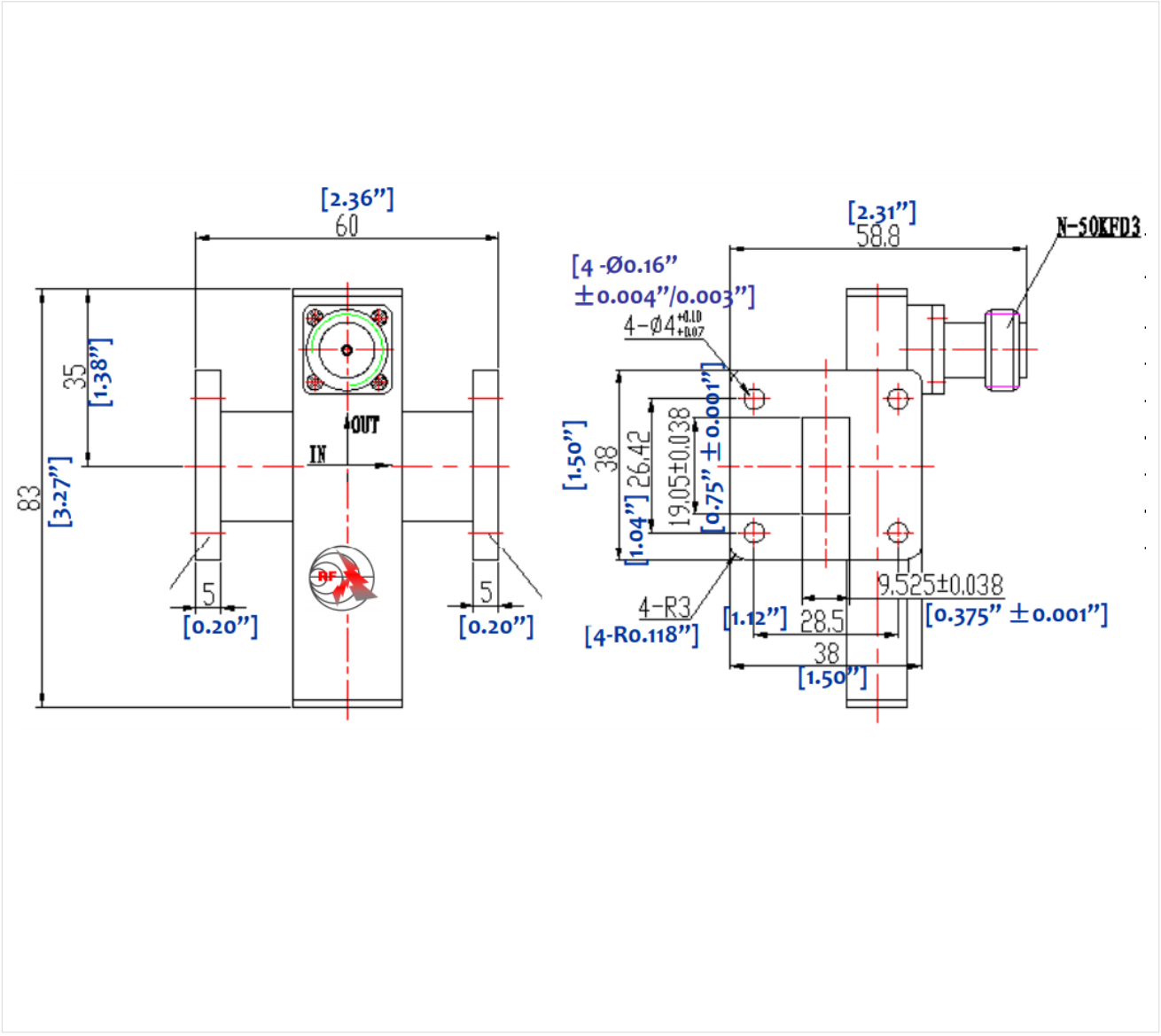
Typical Performance Plots

Coupling



Outline Drawing:

All Dimensions in mm [inches]



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