



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFC27W500G33

500W Wide Band High Power Circulator 3.0~3.66GHz



Features

- High power handling up to 500W
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

Typical Applications

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

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

Parameter	Min.	Typ.	Max.	Units
Frequency Range	3.0-3.66			GHz
Insertion Loss	0.5			dB
Isolation (Note 1)			20	dB
VSWR			1.4	:1
Forward Power (CW)			500	W
Reverse Power (CW)			500	W
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)			
Input / Output Connectors	N or 7/16			
Finish	Nickel Plated			
Case Material	Aluminum Alloy			
Impedance	50			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~+70°C
Storage Temperature		-40°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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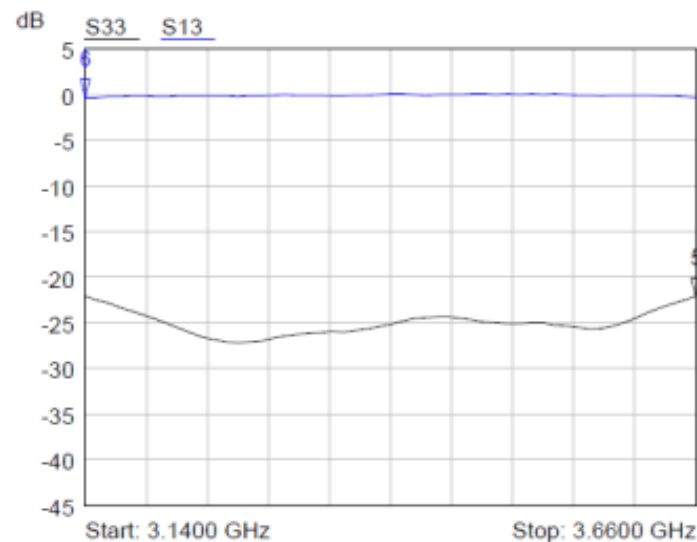
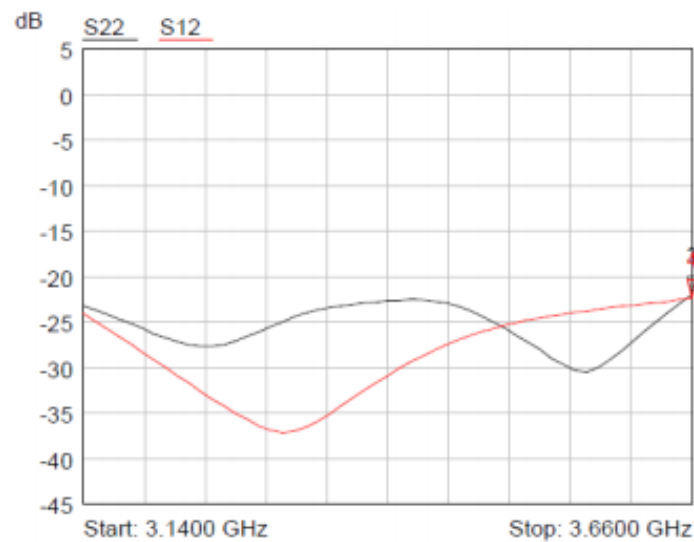
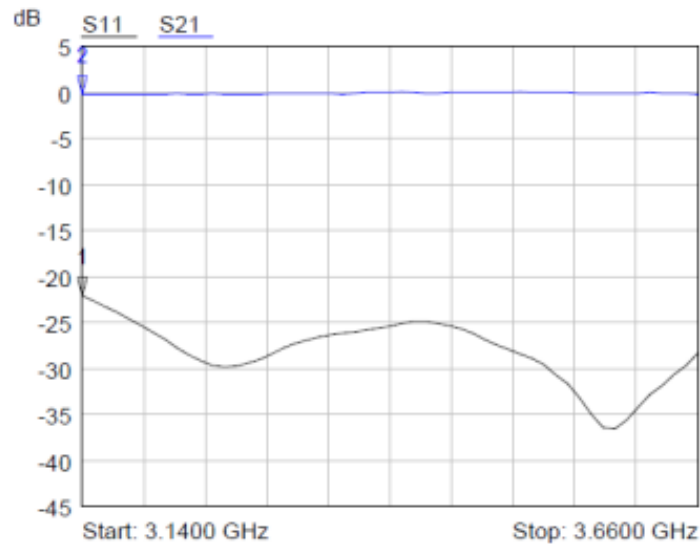


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Typical Performance Plots



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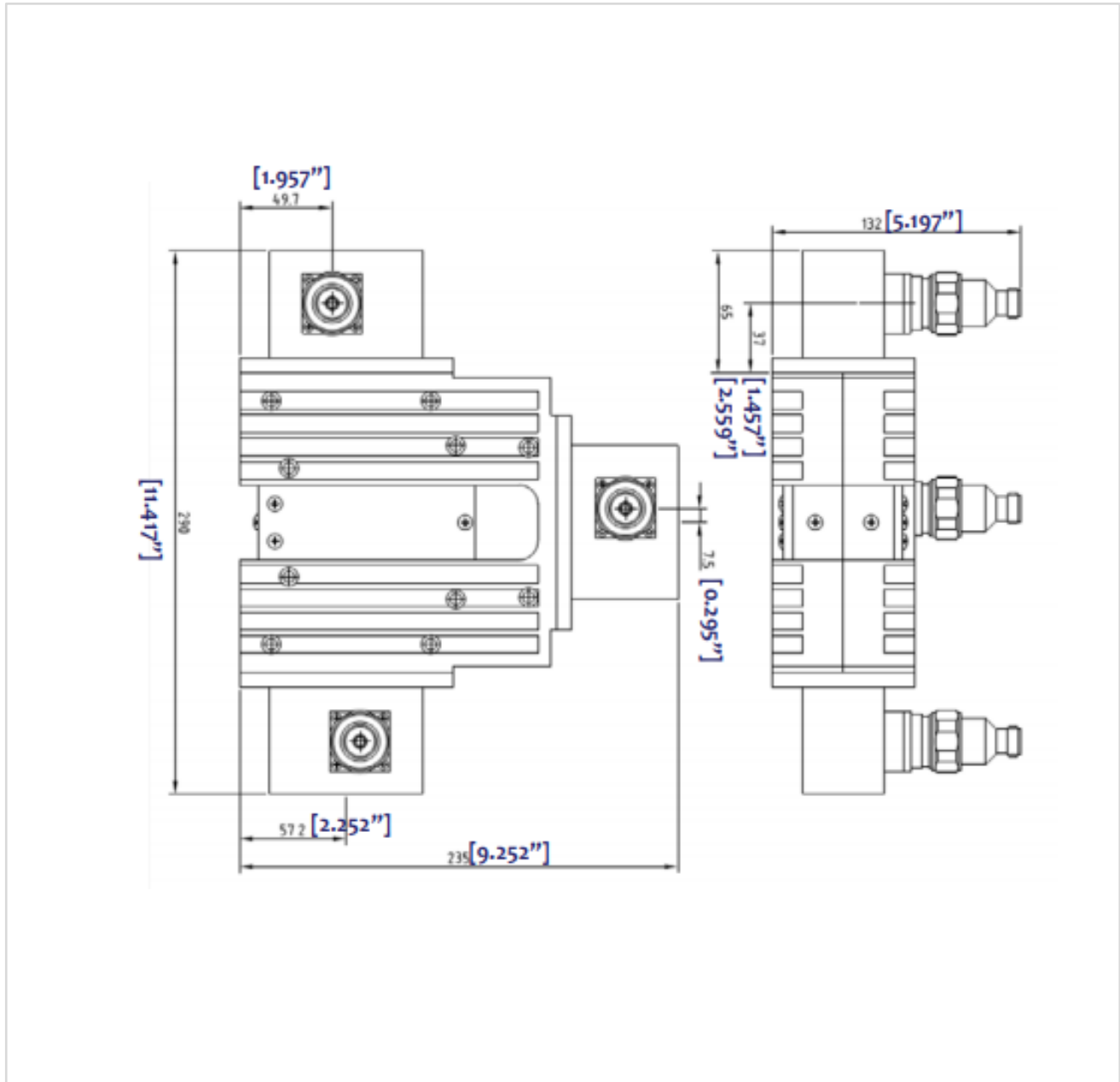
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Outline Drawing:

All Dimensions in mm [inches]



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