



Coaxial 200W 5dB Directional Coupler 0.8-3.5 GHz



Features

- High power handling up to 200W
- Wide band operation
- High directivity within operational band
- Low Insertion Loss

Typical Applications

- Aerospace and Military
- Wireless Infrastructure
- Test and Measurement

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

Parameters		Min.	Typ.	Max.	Units
Frequency Range		0.8		3.5	GHz
Nominal Coupling		4.2	5	5.8	dB
Amplitude Balance			± 0.5	± 0.7	dB
Directivity		20	22		dB
Insertion Loss (Excl Coupling)				0.4	dB
Insertion Loss (True)			1.8	2.0	dB
VSWR Primary			1.15	1.25	: 1
VSWR Secondary			1.2	1.25	: 1
Power Rating	Average	200			W
	Peak	3			KW
Impedance		50			Ohms
Weight		10.8 Max.			ounces
Input / Output Connectors		N-Female			
Material		Aluminum			
Finish		Blue Paint			

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Environmental Specifications and Test Standards

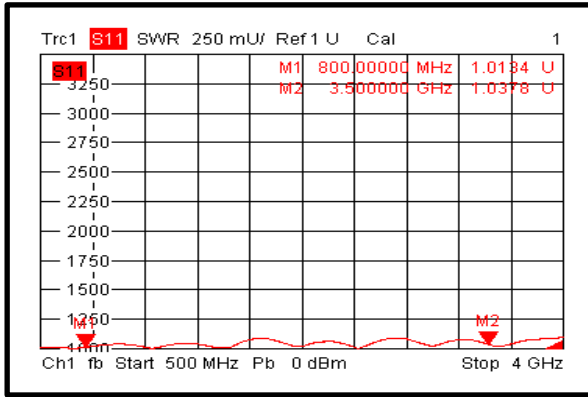
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+85°C
Storage Temperature		-50°C~+105°C
Thermal Shock		1 Hour@ -40°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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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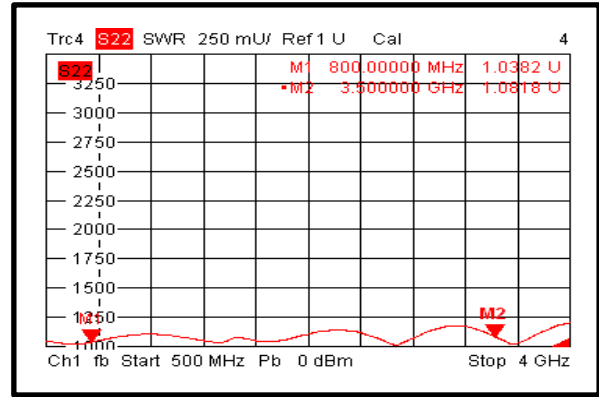


Typical Performance Plots

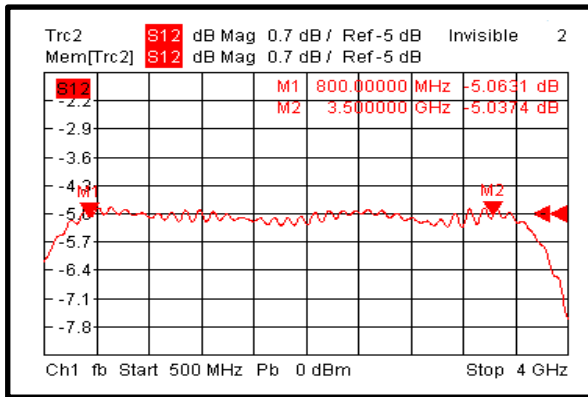
Primary VSWR



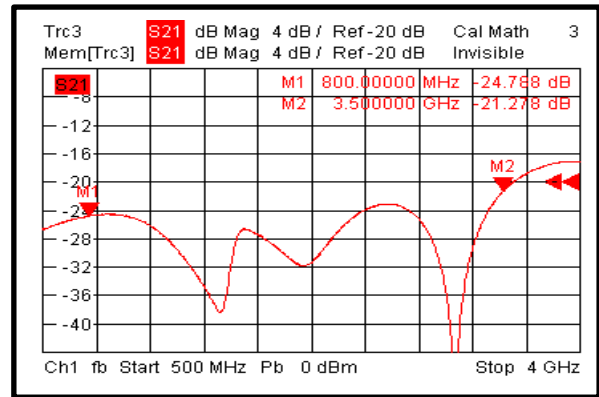
Secondary VSWR



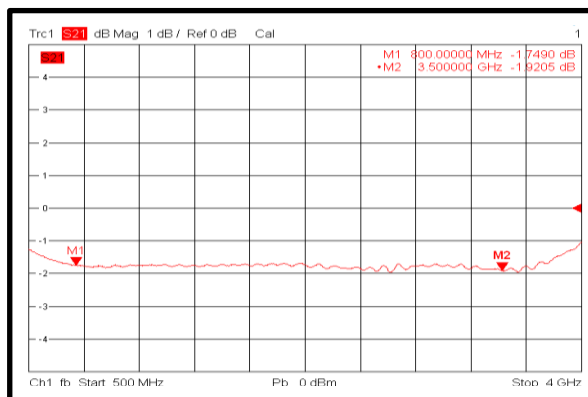
Nominal Coupling



Directivity



Insertion Loss



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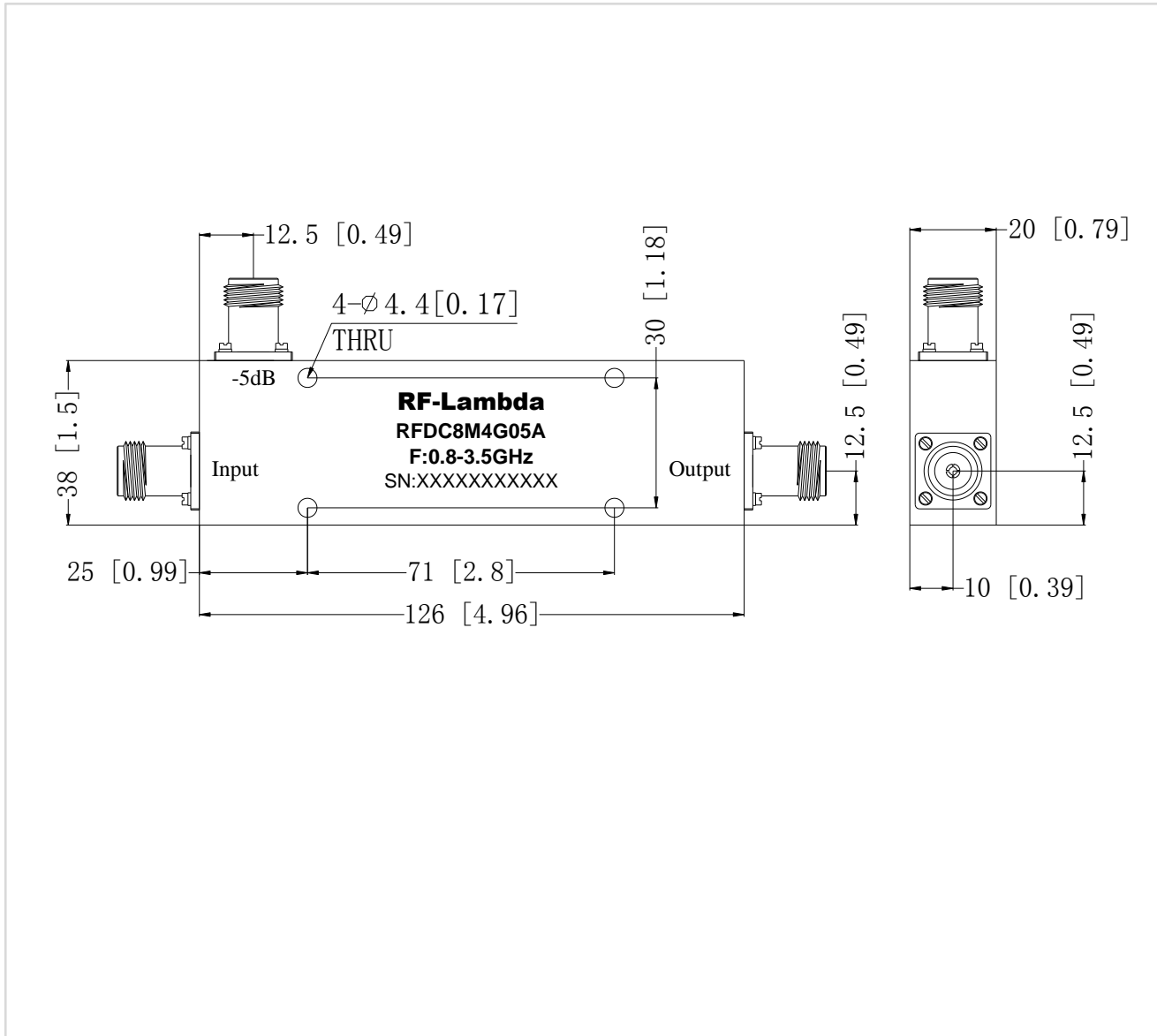


Outline Drawing:

All Dimensions in mm [inches]

Outline Tolerances ± 0.5 [0.02]

Mounting Holes Tolerances ± 0.2 [0.008]



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