



Coaxial 100W 30dB Directional Coupler 0.5 - 2GHz



Features

- High power handling up to 100 W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- High peak to average handling capability
- Stable performance over temperature

Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

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

Parameters		Min.	Typ.	Max.	Units
Frequency Range		0.5		2	GHz
Nominal Coupling		29	30	31	dB
Frequency Sensitivity			± 0.5	± 1.0	dB
Directivity		20	22		dB
Insertion Loss (Excl Coupling)				0.3	dB
Insertion Loss (true)			0.15	0.3	dB
VSWR Primary			1.2	1.25	:1
VSWR Secondary			1.15	1.25	:1
Power Rating	Average	100			W
	Peak	3			KW
Impedance		50			Ohms
Weight		6.7			ounces
Input / Output Connectors		N-Female			
Material		Aluminum			
Finish		Blue Paint			

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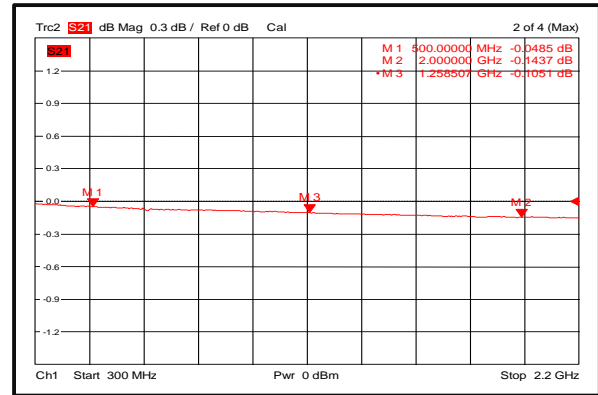


Environmental Specifications

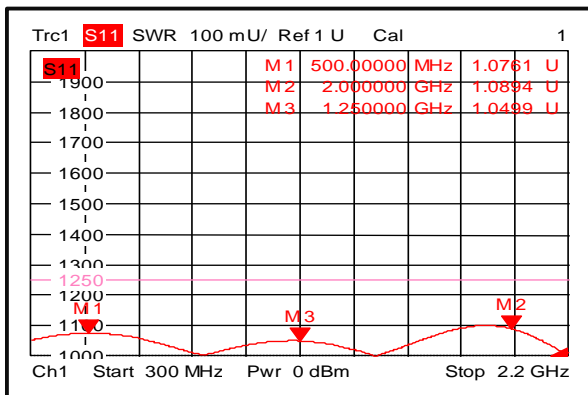
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Typical Performance Plots

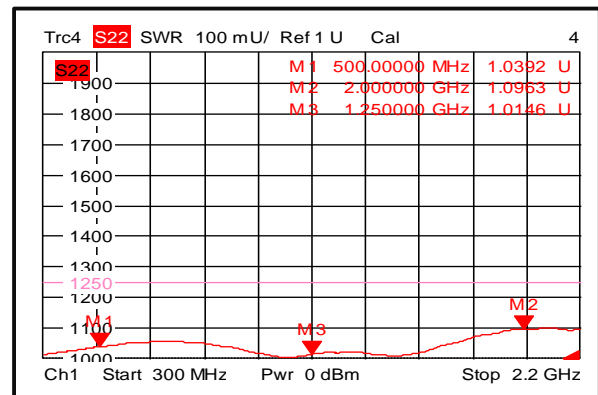
Insertion Loss



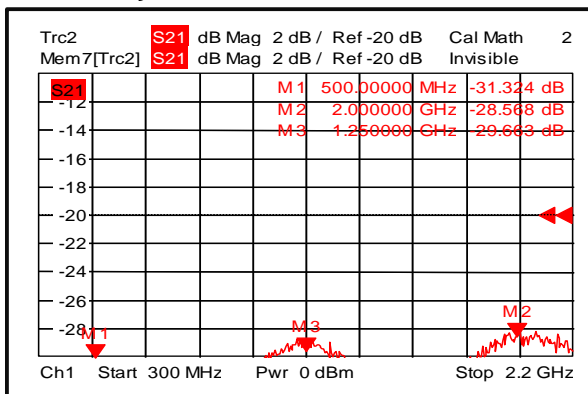
Primary VSWR



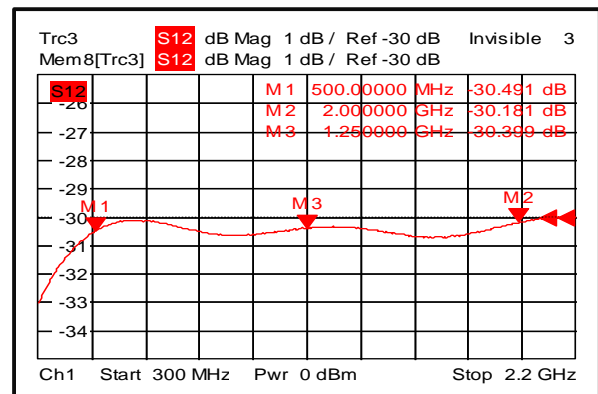
Secondary VSWR



Directivity



Nominal Coupling



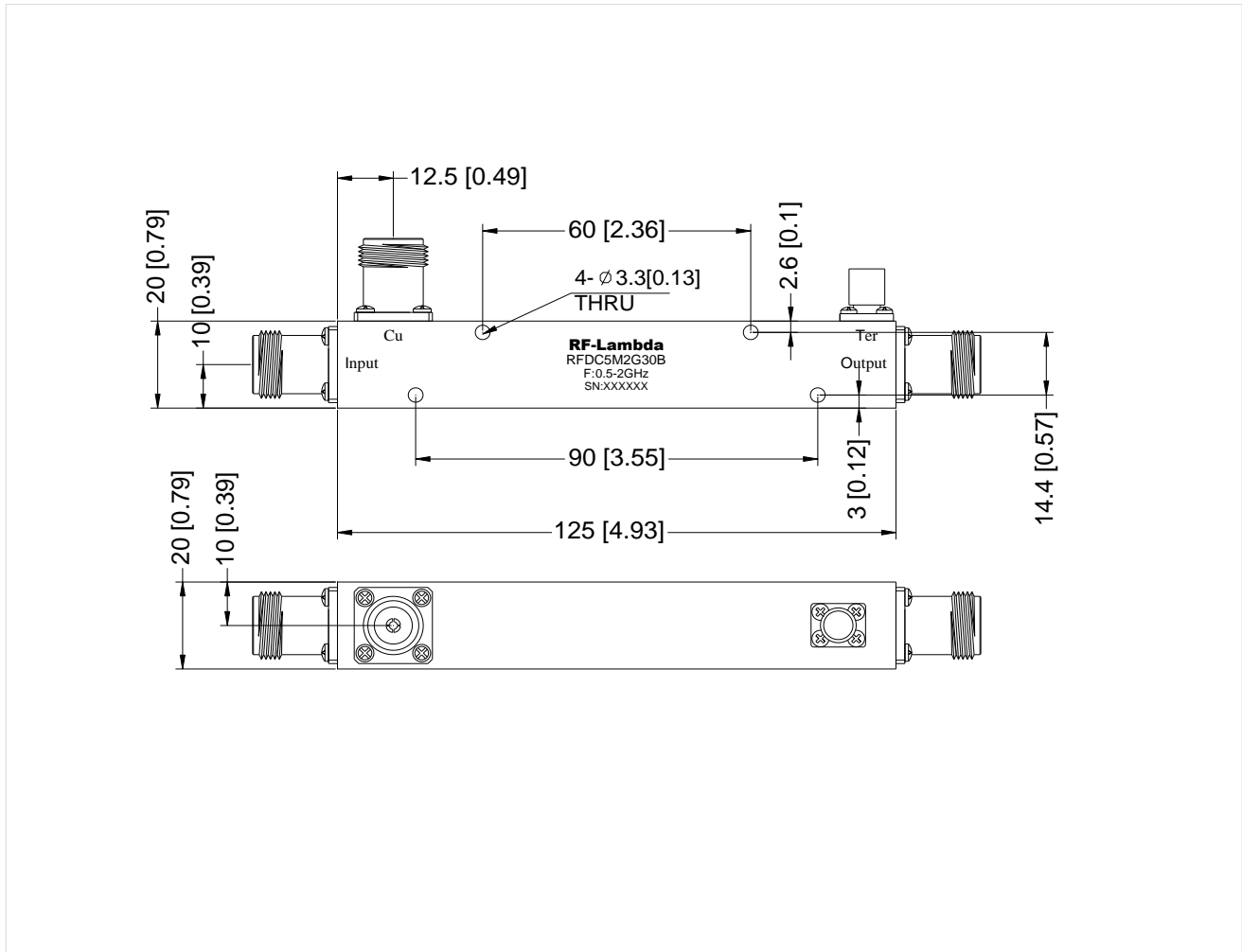
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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