



Coaxial 50W 10dB Directional Coupler 0.8 - 2.5GHz



Features

- High power handling capability up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- Aerospace and military applications
- LMDS multi-carrier operation
- High peak to average handling capability
- All specifications can be modified upon request

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Electrical Specifications, $T_A=25^\circ C$

Parameters		Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		0.8		1.6	1.6		2.5	GHz
Nominal Coupling		9	10	11	9	10	11	dB
Frequency Sensitivity			± 0.4	± 0.5		± 0.3	± 0.5	dB
Directivity		20	25		20	21		dB
Insertion Loss (Excl Coupling)				0.4			0.5	dB
Insertion Loss (True)			0.6	0.8		0.7	1.0	dB
VSWR Primary			1.15	1.2		1.15	1.2	: 1
VSWR Secondary			1.15	1.2		1.15	1.2	: 1
Power Rating	Average	50						W
	Peak	1						KW
Impedance		50						Ohms
Weight		1.76						Ounces
Input / Output Connectors		SMA - Female						
Material		Aluminum						
Finishing		Blue Paint						

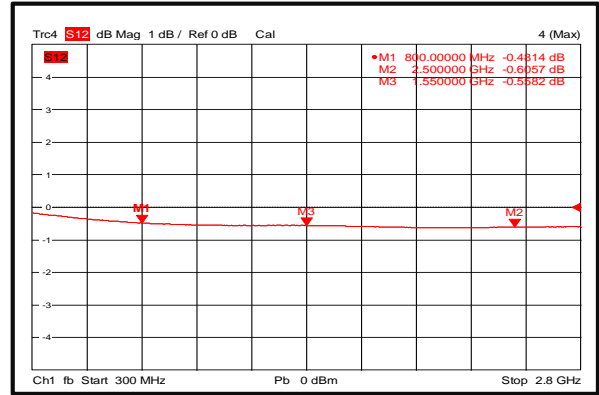


Environmental Specifications

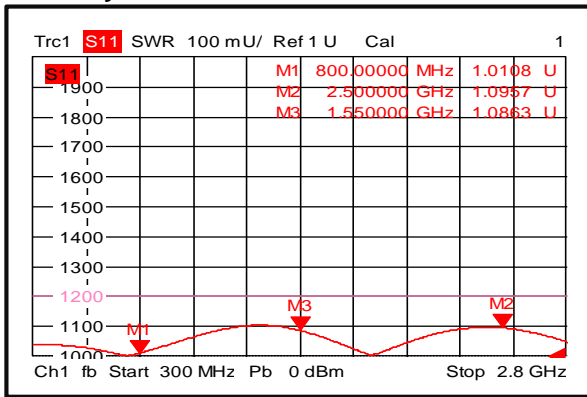
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

Typical Performance Plots

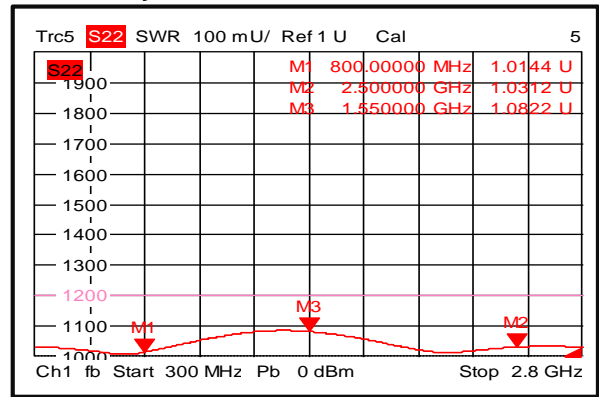
Insertion Loss



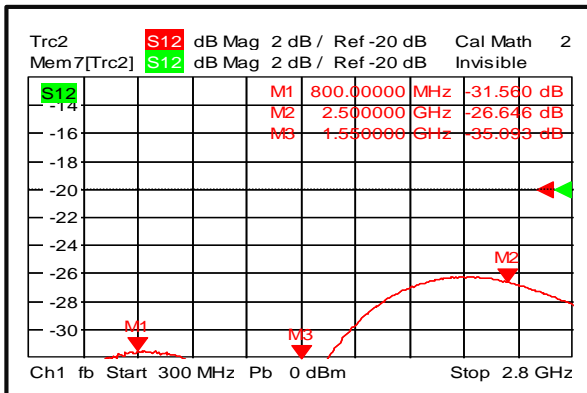
Primary VSWR



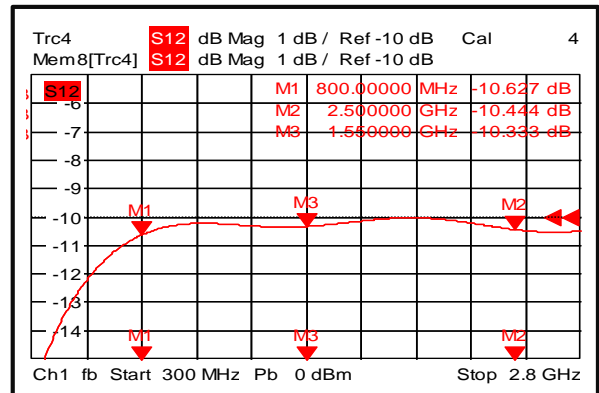
Secondary VSWR



Directivity



Nominal Coupling



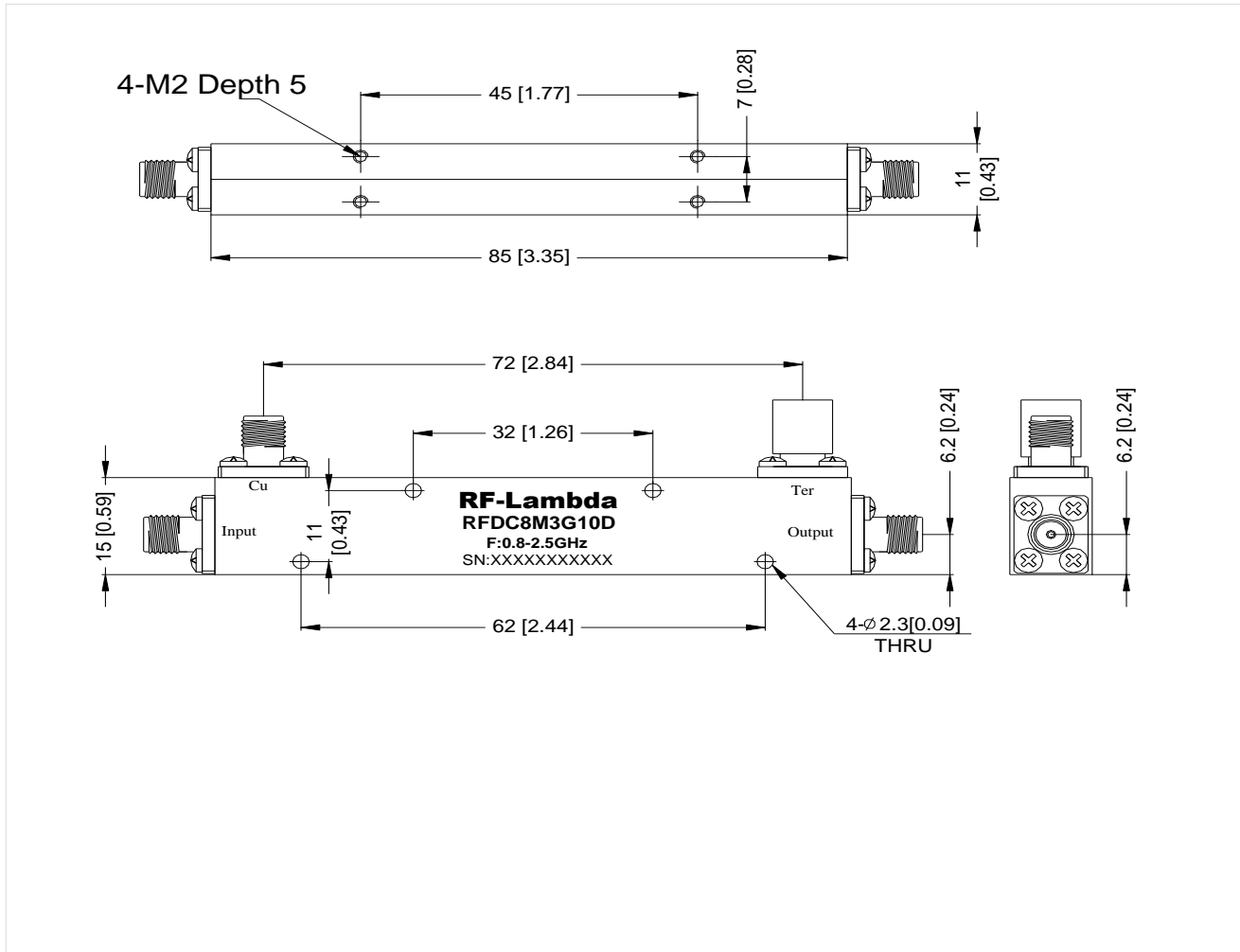
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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