



Coaxial 50W 10 dB Directional Coupler 2-18GHz



Features

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

Electrical Specifications, TA = +25° C

Parameters		Min	Typ	Max	Min	Typ	Max	Units
Frequency Range		2		8	8		18	GHz
Nominal Coupling		9	10	11	9	10	11	dB
Frequency Sensitivity			±0.5	±0.7		±0.5	±0.7	dB
Directivity		15	18		12	14		dB
Insertion Loss (Excl Coupling)			0.4	0.5		0.5	0.7	dB
VSWR Primary			1.3	1.5		1.4	1.5	: 1
VSWR Secondary			1.3	1.5		1.4	1.5	: 1
Power Rating	Average	50						W
	Peak	500						W
Impedance		50						Ohms
Weight		1.06						ounces
Input / Output Connectors		SMA - Female						
Material		Aluminum						
Finishing		Blue Paint						

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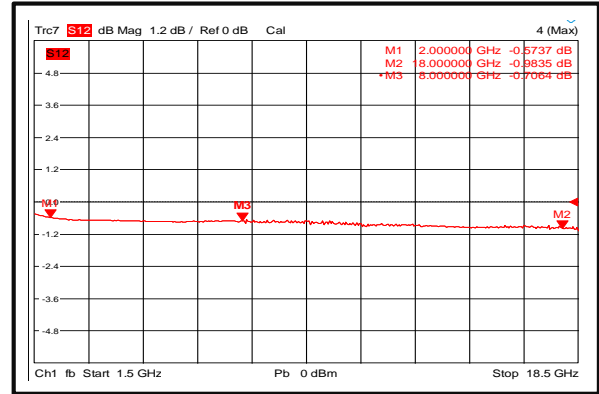


Environmental Specifications

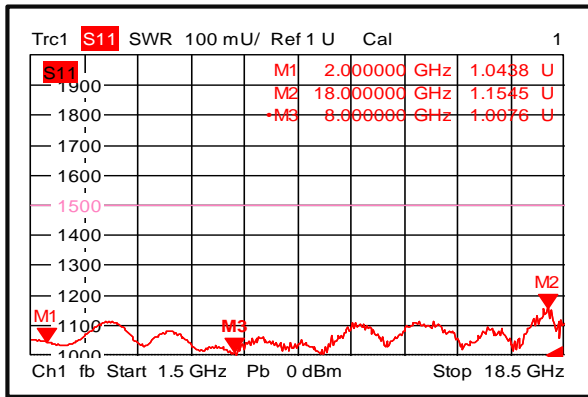
Operational Temperature (°C)	-45°C to +85°C
Storage Temperature (°C)	-55°C to +125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100%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

Typical Performance Plots

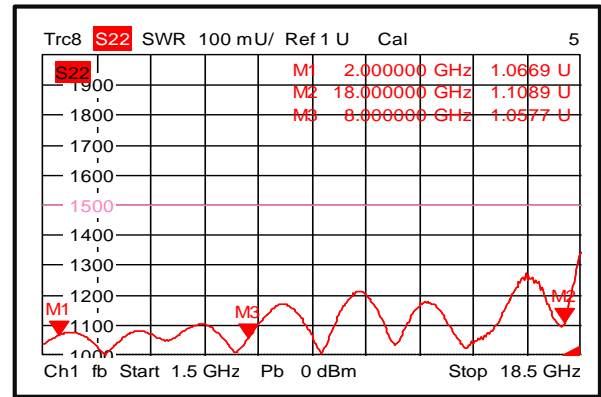
Insertion Loss



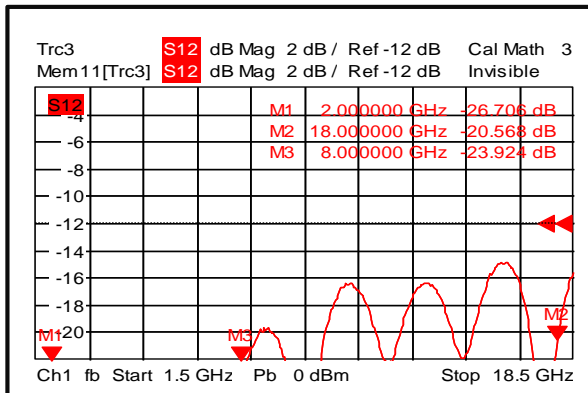
Primary VSWR



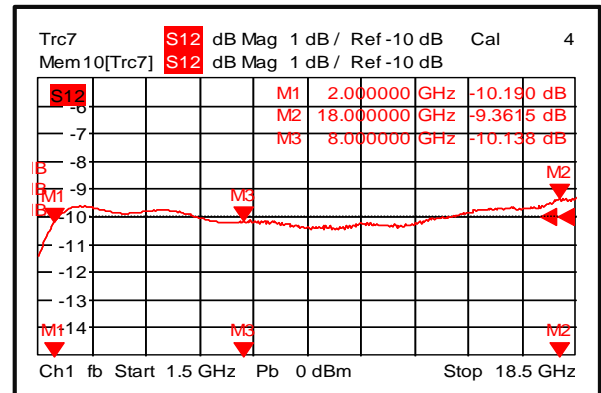
Secondary VSWR



Directivity



Nominal Coupling



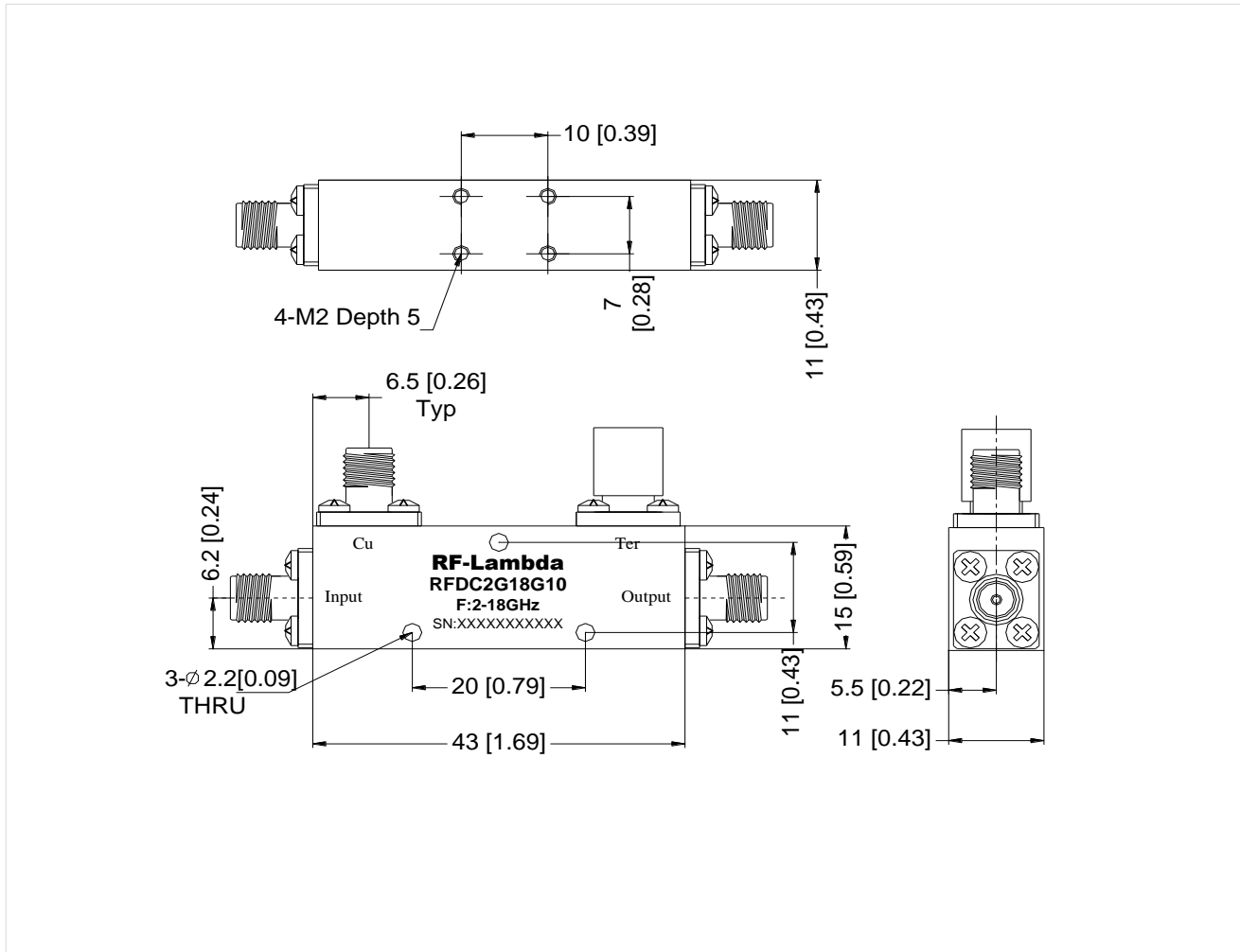
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.2 [0.008]



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