



### 50 W 0.8-2.5 GHz 20 dB Directional Coupler



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

#### Electrical Specifications

Parameters		Min.	Typ.	Max.	Units
Frequency Range		0.8		2.5	GHz
Nominal Coupling		19	20	21	dB
Frequency Sensitivity			±0.5	±0.7	dB
Directivity		20	22		dB
Insertion Loss (Excl Coupling)			0.25	0.4	dB
VSWR Primary			1.15	1.2	
VSWR Secondary			1.15	1.2	
Power Rating	Average	50			W
	Peak	0.5			KW
Impedance		50			Ohms
Operating Temperature		-45 to +85			°C
Weight		1.76			ounces
Input / Output Connector		SMA-Female			
Material		Aluminum			
Finishing		Gray Paint			

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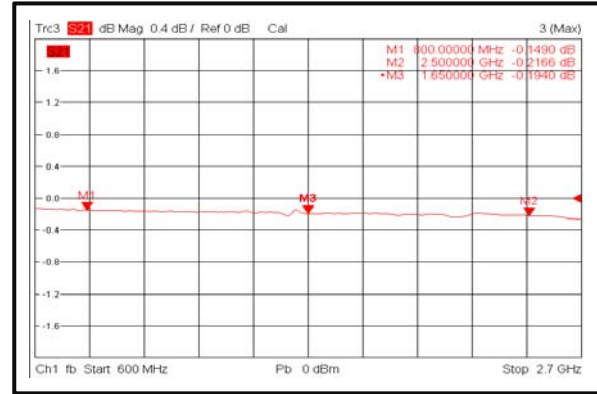


### Environment specifications

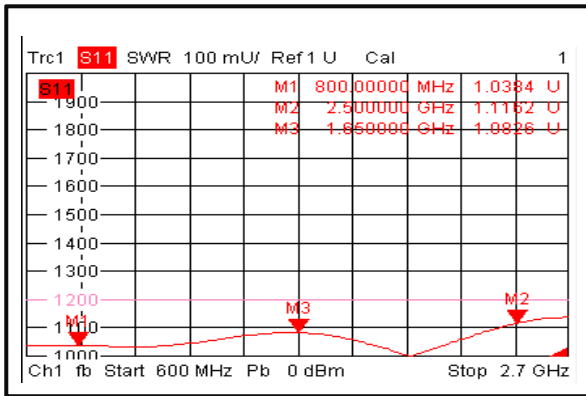
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave, 3 axis both directions

### Typical Performance Plots

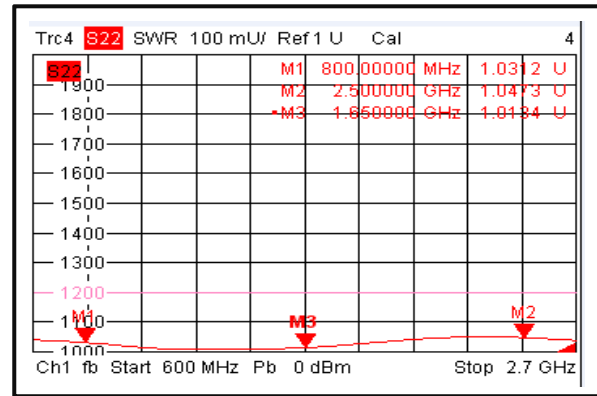
#### Insertion Loss



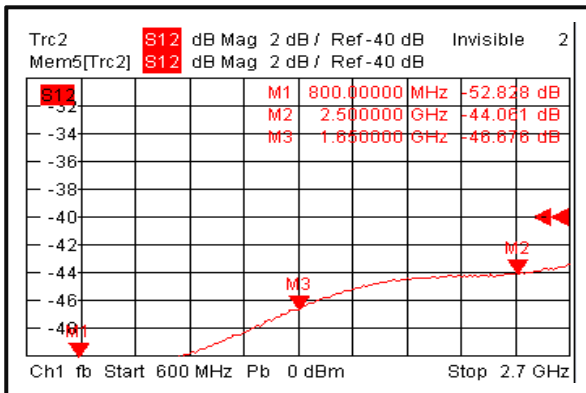
#### Primary VSWR



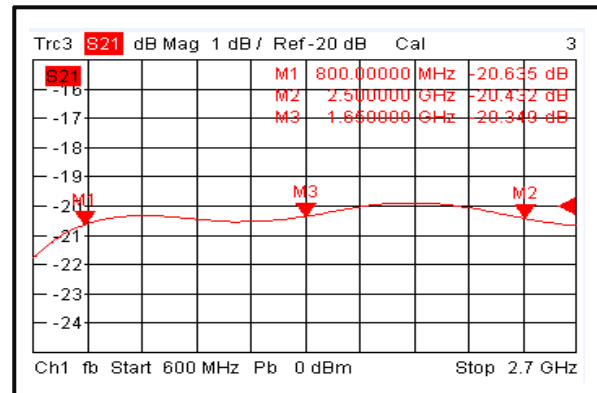
#### Secondary VSWR



#### Directivity



#### Nominal Coupling



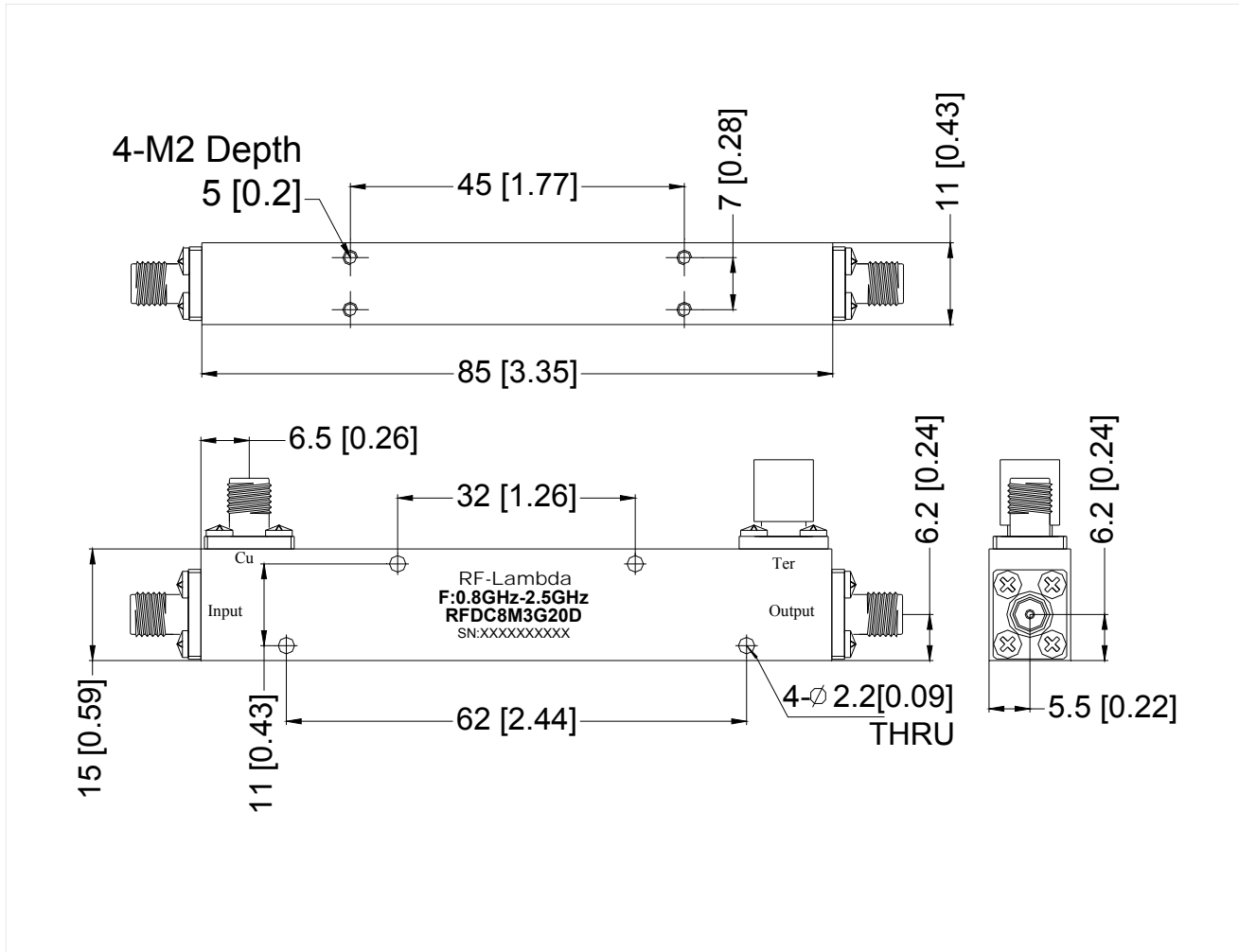
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### Outline Drawing:

All Dimensions in mm (inches)

Tolerance  $\pm 0.25$  (0.01)



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