



### Coaxial 50W 0.5-2GHz 10dB Directional Coupler



- High power handle capability up to 50W
- Wide band operation
- High isolation 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.	Min.	Typ.	Max.	Units
Frequency Range	0.5		1	1		2	GHz
Nominal Coupling	9	10	11	9	10	11	dB
Frequency Sensitivity		±0.5	±0.7		±0.5	±0.7	dB
Directivity	20	24		20	22		dB
Insertion Loss (Excl Coupling)		0.3	0.4		0.4	0.5	dB
VSWR Primary		1.1	1.2		1.15	1.2	
VSWR Secondary		1.1	1.2		1.15	1.2	
Power Rating	Average	50					W
	Peak	0.3					KW
Impedance	50					Ohms	
Operating Temperature	-45 to +85					°C	
Weight	85					g	
Input / Output Connector	SMA-Female						
Material	Aluminum						
Finishing	Gray Paint						

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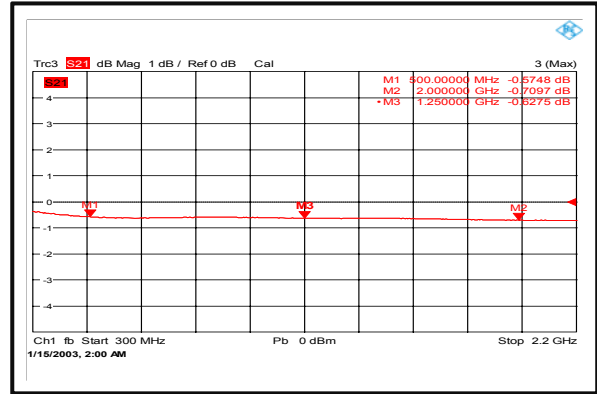


### Environment specifications

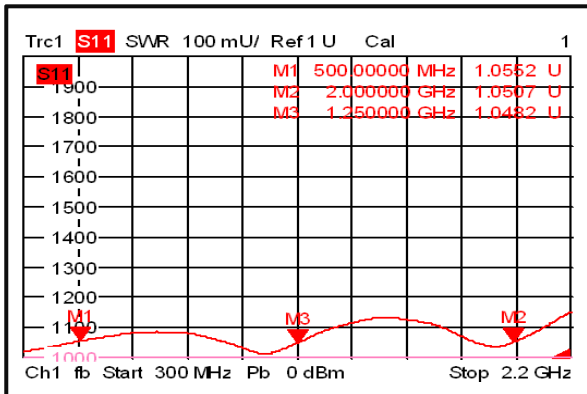
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) ( Optional )
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

### Typical Performance Plots

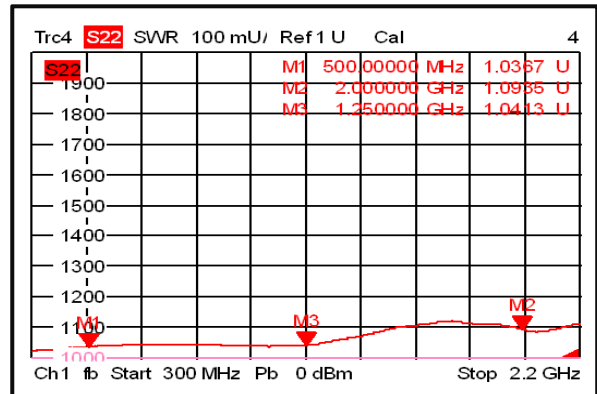
#### Insertion Loss



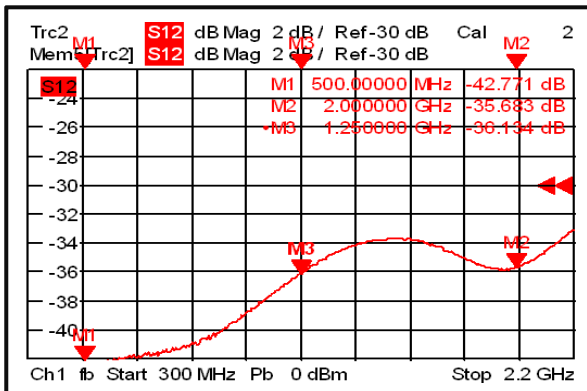
#### Primary VSWR



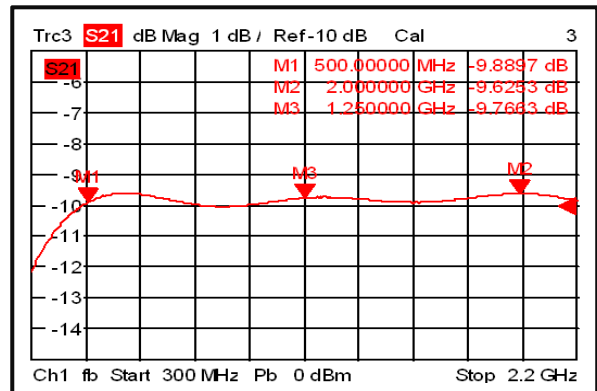
#### Secondary VSWR



#### Directivity



#### Nominal Coupling

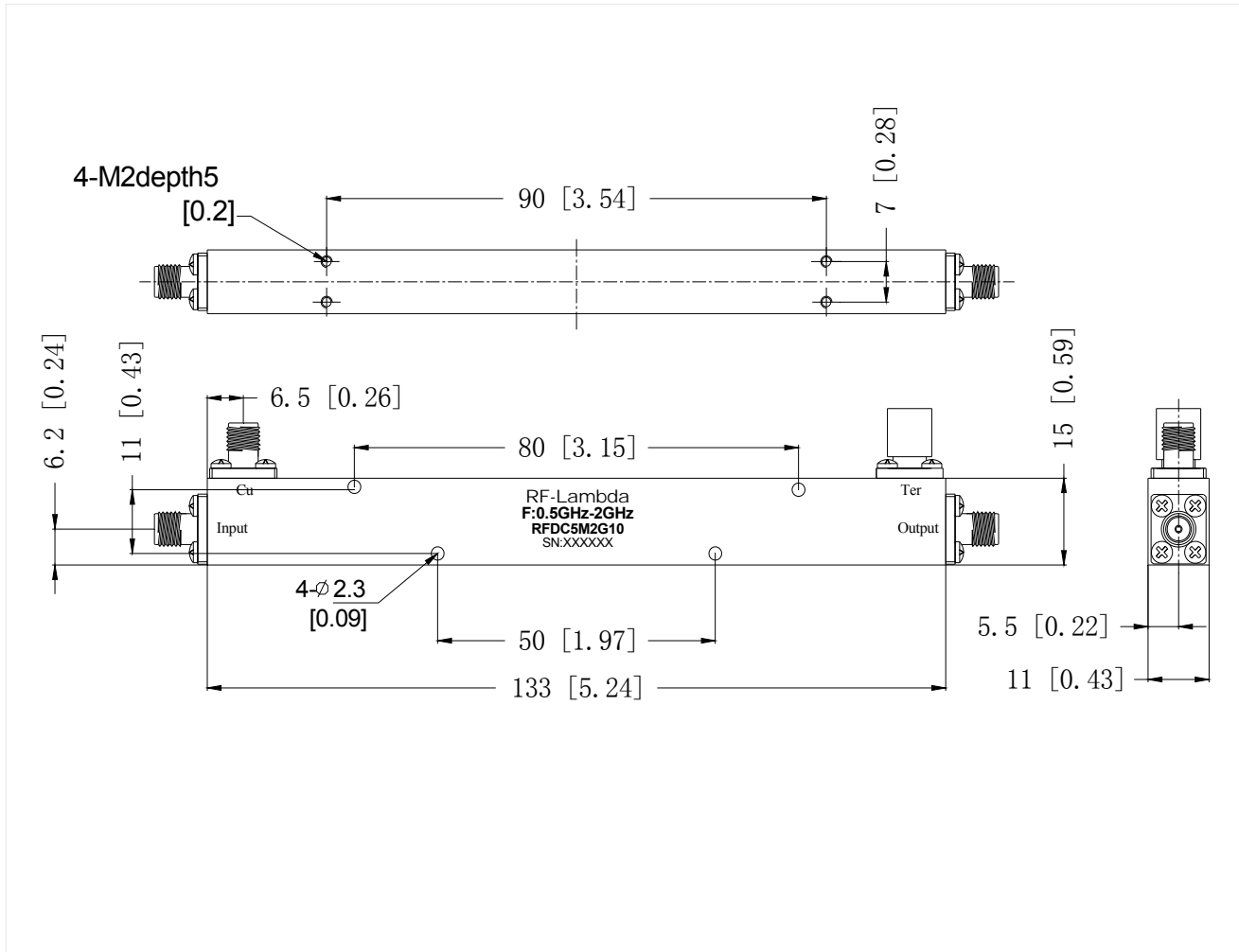




### Outline Drawing:

All Dimensions in mm (inches)

Tolerance  $\pm 0.25$  (0.01)



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