



50 W 1-18 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.	Min.	Typ.	Max.	Units
Frequency Range		1		8	8		18	GHz
Nominal Coupling		19	20	21	19	20	21	dB
Frequency Sensitivity			±0.7	±1.0		±0.7	±1.0	dB
Directivity		16	20		12	14		dB
Insertion Loss (Excl Coupling)			0.3	0.5		0.6	0.8	dB
VSWR Primary			1.2	1.3		1.4	1.6	
VSWR Secondary			1.2	1.3		1.4	1.6	
Power Rating	Average	50						W
	Peak	500						W
Impedance		50						Ohms
Operating Temperature		-45 to +85						°C
Weight		1.41						ounces
Input / Output Connector		SMA-Female						
Material		Aluminum						
Finishing		Blue Paint						

Coaxial 50W 1-18GHz 20dB Directional Coupler

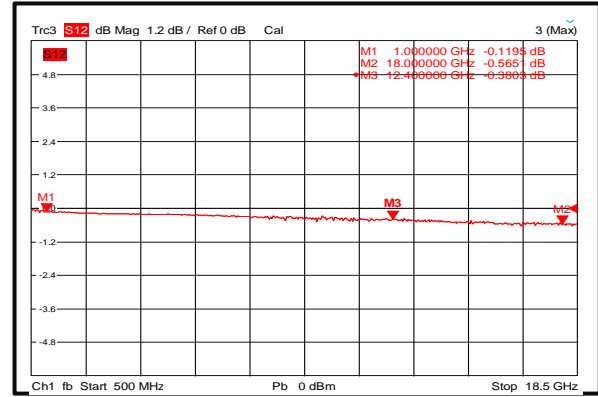


Environment specifications

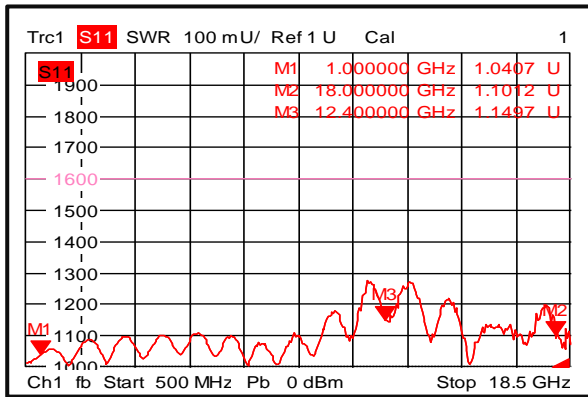
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave, 3 axis both directions

Typical Performance Plots

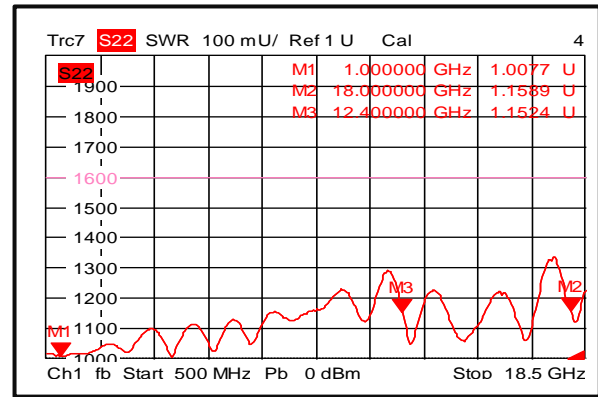
Insertion Loss



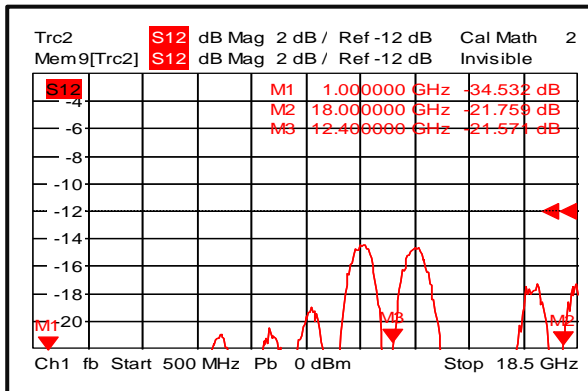
Primary VSWR



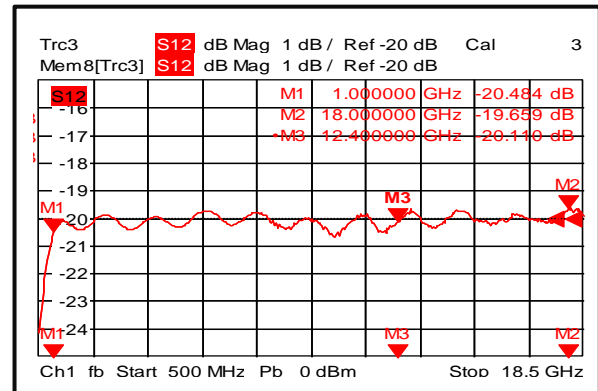
Secondary VSWR



Directivity



Nominal Coupling





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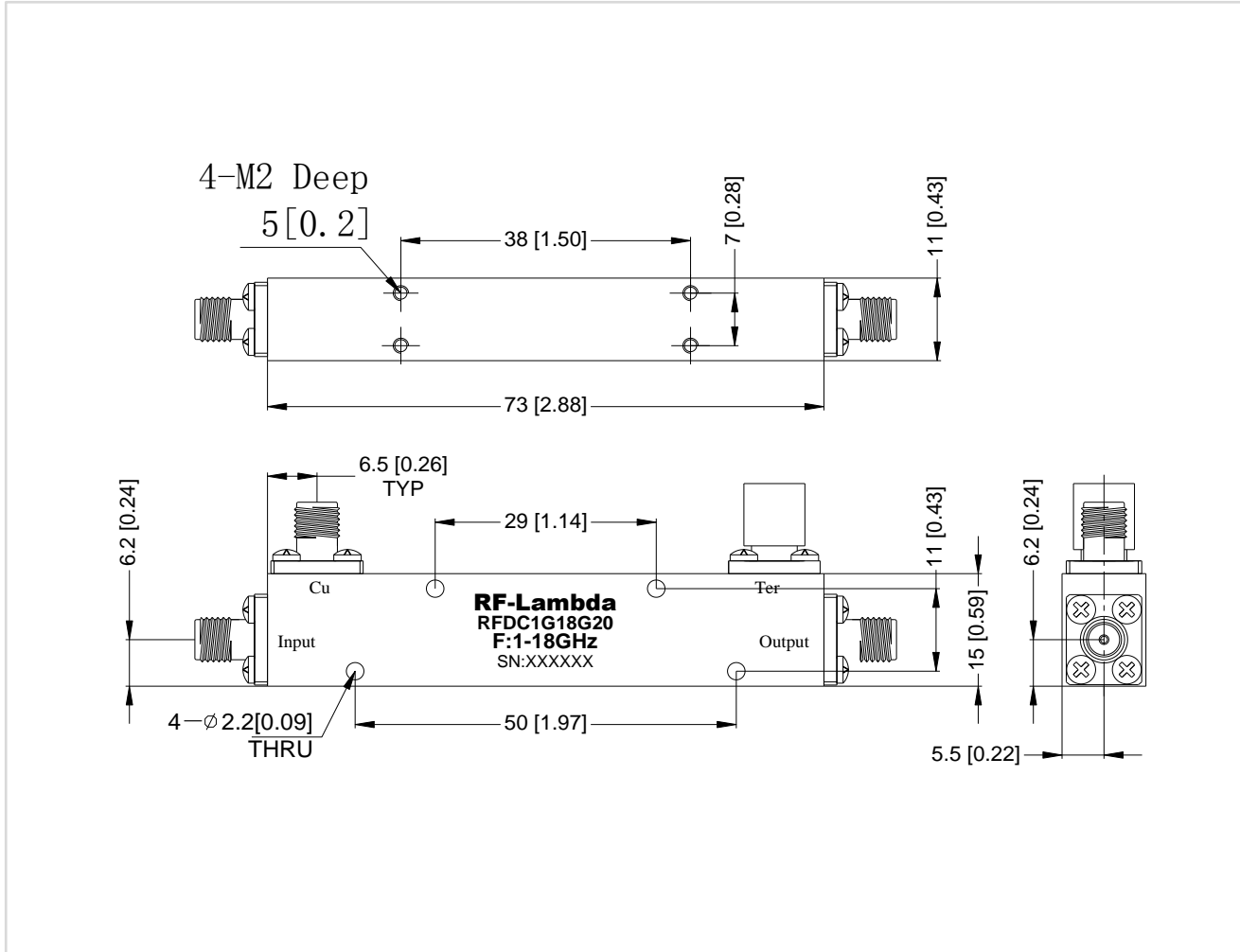
LEADER OF RF BROADBAND SOLUTIONS

RFDC1G18G20

Outline Drawing:

All Dimensions in mm (inches)

Tolerance ± 0.2 (0.008)



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