



RF-LAMBDA

The power beyond expectations

RFHB01G18GVT

50W 1-18GHz 90° Hybrid 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.	Min.	Typ.	Max.	Units
Frequency Range		1		1.2	1.2		8	8		18	GHz
Nominal Coupling			3			3			3		dB
Insertion Loss			0.3	0.5		0.7	1.0		1.2	1.5	dB
Isolation		20	25		18	20		15	18		dB
VSWR			1.15	1.2		1.25	1.3		1.4	1.6	
Amplitude Unbalance			±1.1	±1.2		±0.6	±1.0		±0.6	±1.0	dB
Phase Unbalance			±3	±4		±5	±8		±10	±12	deg
Power Rating	Forward Power	50									W
	Peak Power	0.3									KW
Impedance		50									Ohms
Weight		4.41									ounce
Operating Temperature		-45 to +85									°C
Input / Output Connector		SMA-Female									
Material		Aluminum									
Finishing		Gray Paint									

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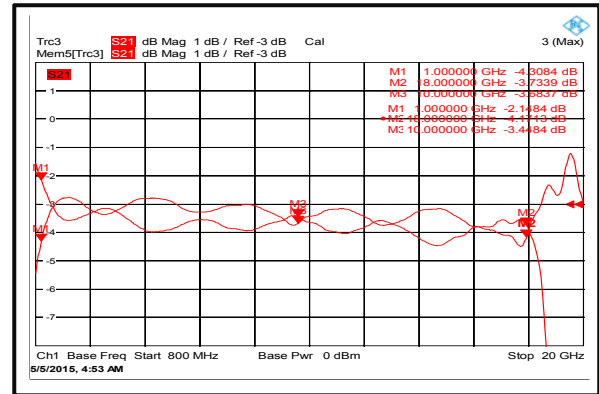
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Environment Specifications

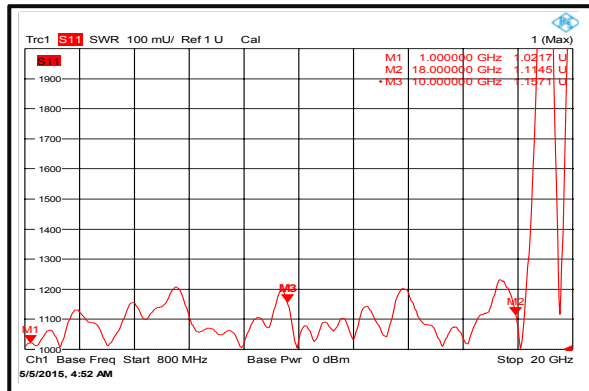
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Typical Performance Plots

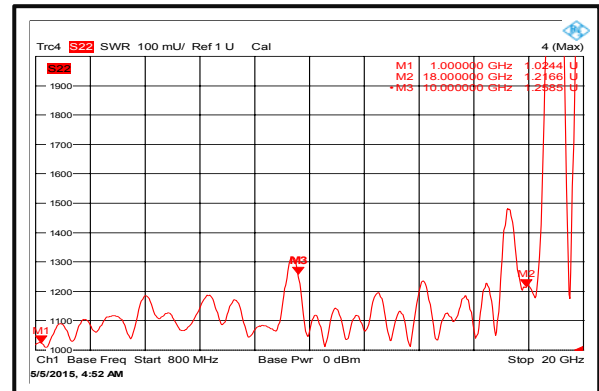
Loss & Amplitude Unbalance



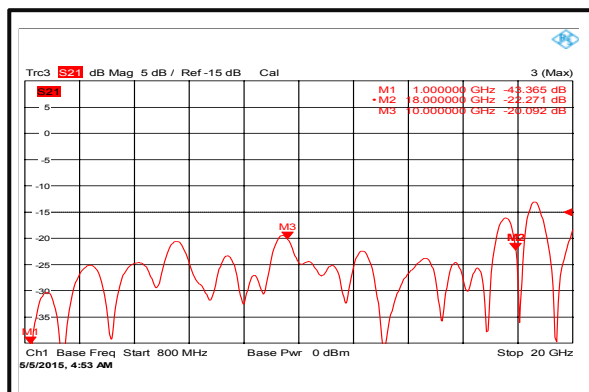
Input VSWR



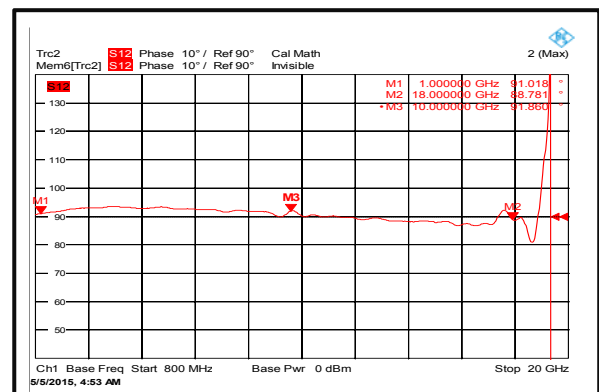
Output VSWR



Isolation



Phase Unbalance

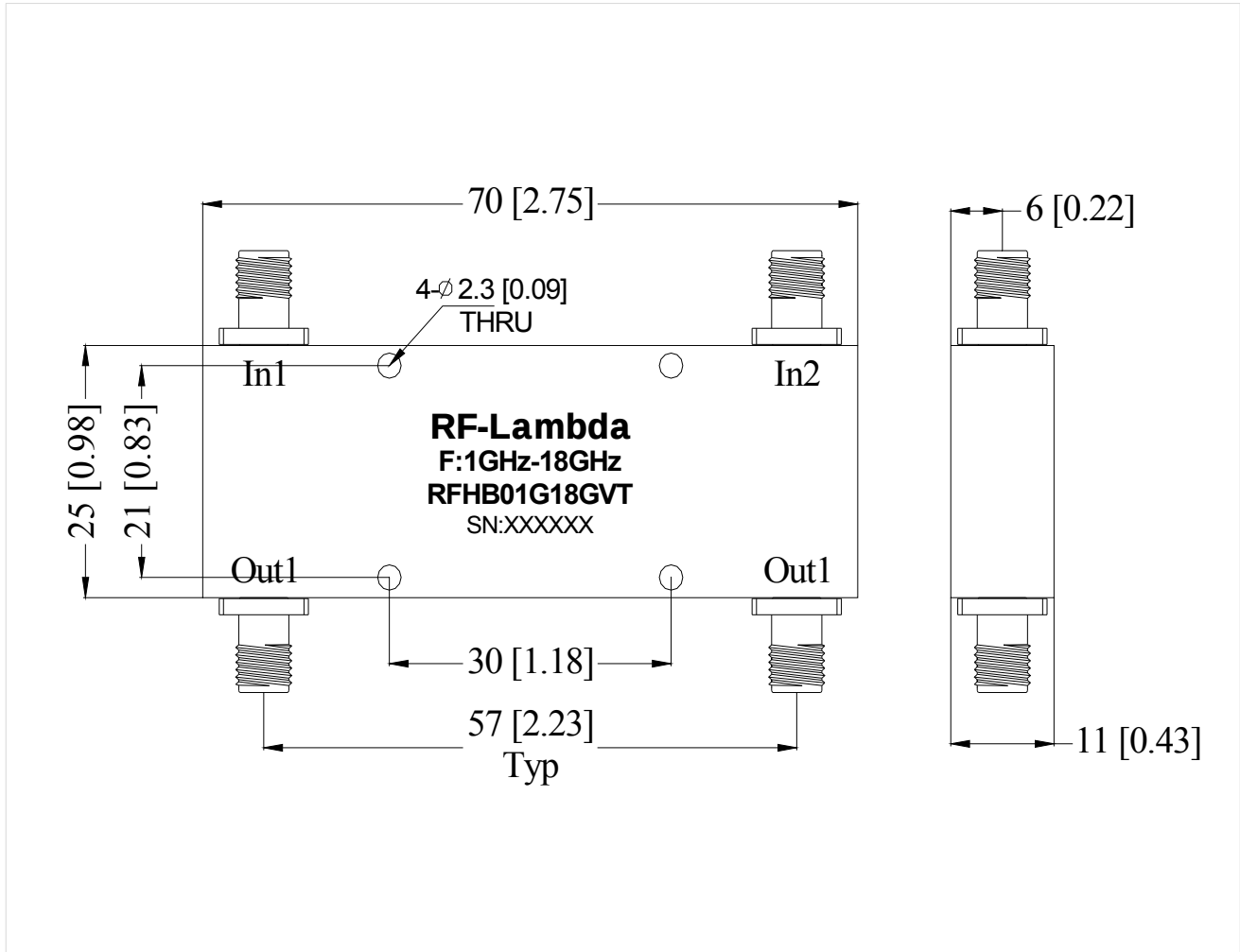


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Outline Drawing:

All Dimensions in mm (inches)

Tolerance ± 0.2 (0.008)



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