



### Coaxial 50 W 4-8GHz 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.	Units
Frequency Range		4		8	GHz
Nominal Coupling			3		dB
Insertion Loss			0.25	0.35	dB
Isolation		18	22		dB
Amplitude Unbalance			±0.35	±0.5	dB
Phase Unbalance			±2	±3	deg
VSWR			1.2	1.3	
Power Rating	Average	50			W
	Perk	0.5			KW
Impedance		50			Ohms
Weight		0.55			ounces
Operating Temperature		-45 to +85			°C
Input / Output Connector		SMA-Female			
Material		Aluminum			
Finishing		Gray paint			

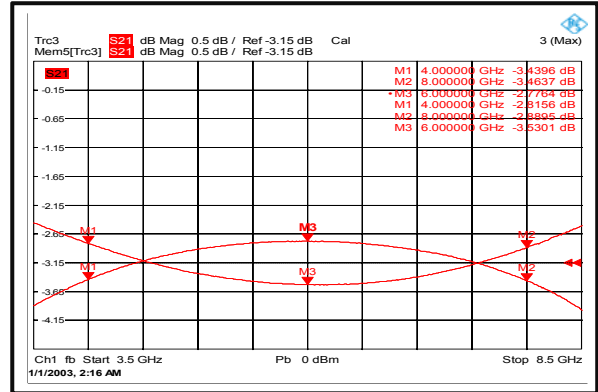


### Environment Specifications

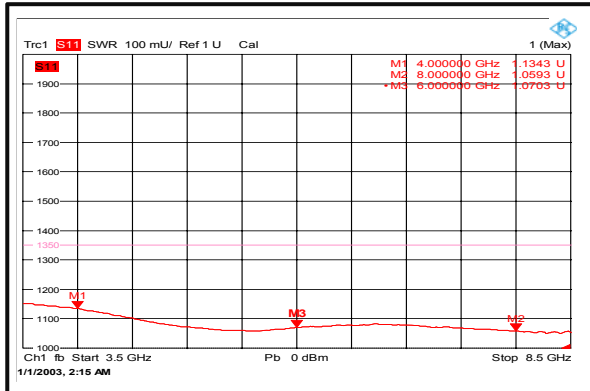
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

### Typical Performance Plots

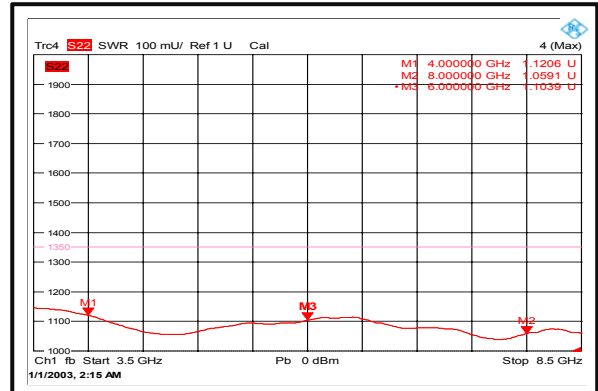
#### Loss & Amplitude Unbalance



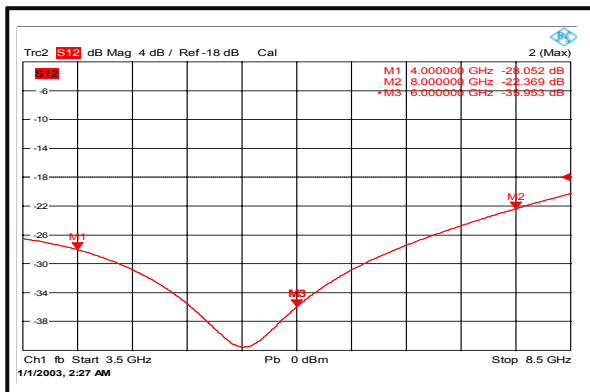
#### Input VSWR



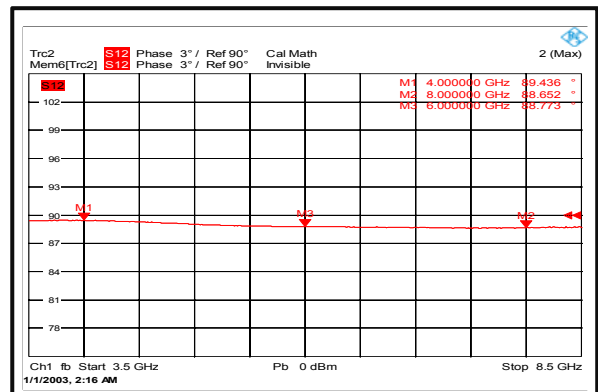
#### Output VSWR



#### Isolation



#### Phase Unbalance

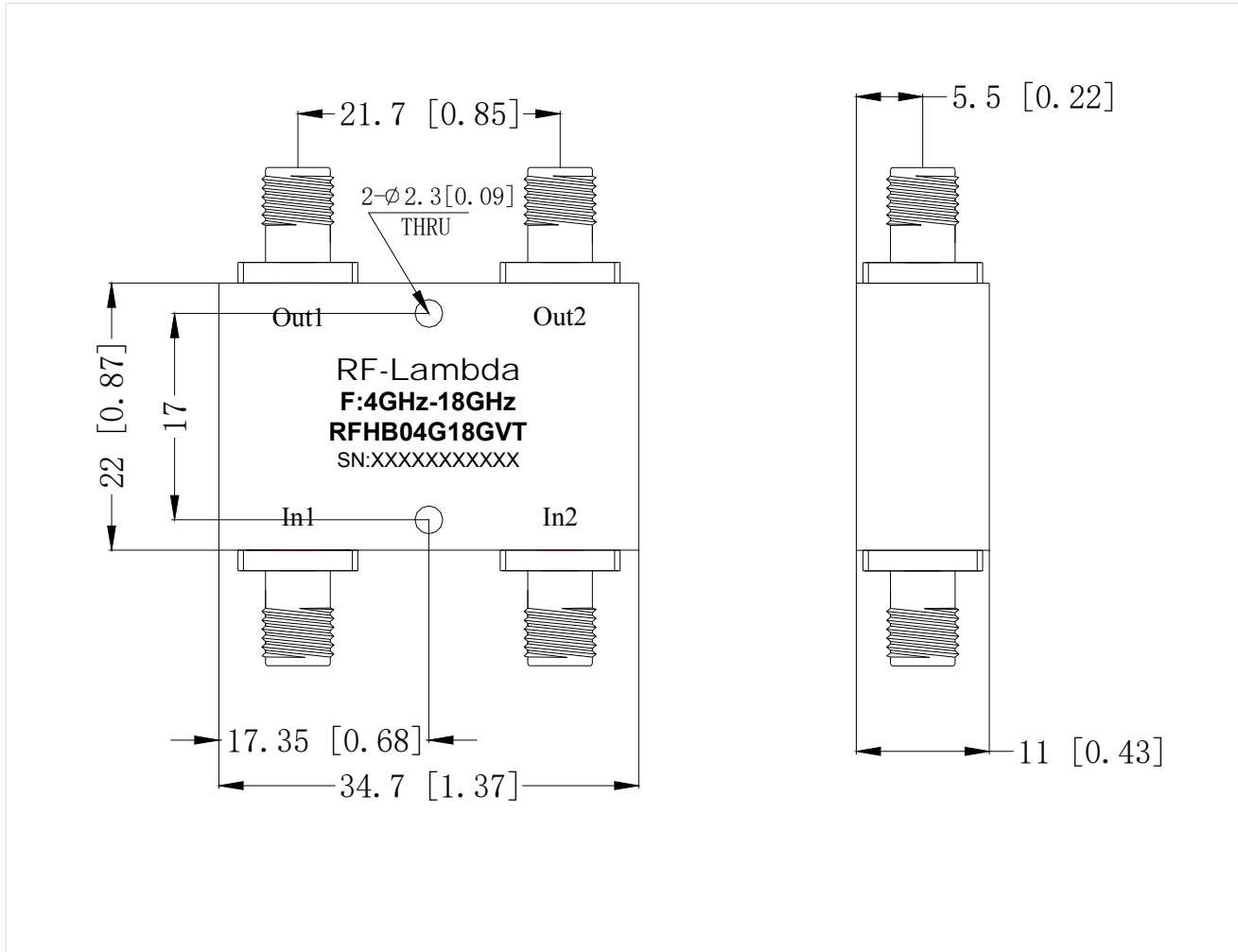




### Outline Drawing:

All Dimensions in mm (inches)

Tolerance  $\pm 0.2$  (0.008)



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