



### 50W 2-18GHz 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.	Units	
Frequency Range	2		8	8		18	GHz	
Nominal Coupling		3			3			
Insertion Loss		0.8	1.0		1.1	1.3	dB	
Isolation	18	20		16	18		dB	
Amplitude Unbalance		±0.5	±0.6		±0.6	±0.7	dB	
Phase Unbalance		±4	±5		±8	±10	deg	
VSWR		1.4	1.5		1.45	1.6		
Power Rating	Average	50						W
	Perk	0.3						KW
Impedance	50						Ohms	
Weight	85						g	
Operating Temperature	-45 to +85						°C	
Input / Output Connector	SMA-Female							
Finishing	Gray paint							
Material	Aluminum							

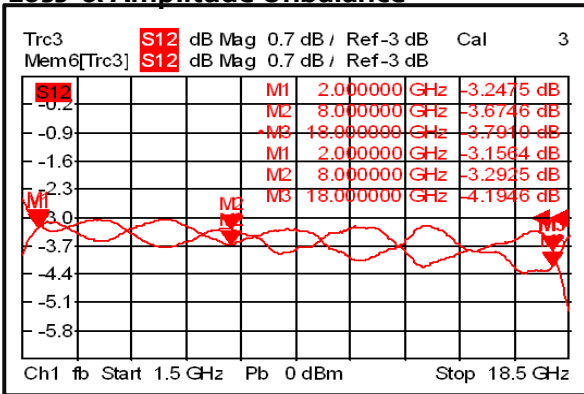
#### Environment Specifications

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

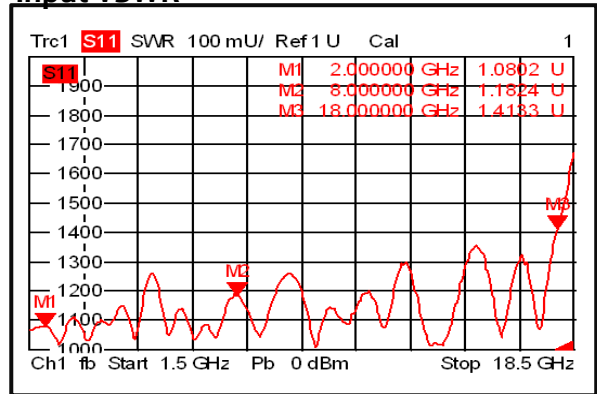


### Typical Performance Plots

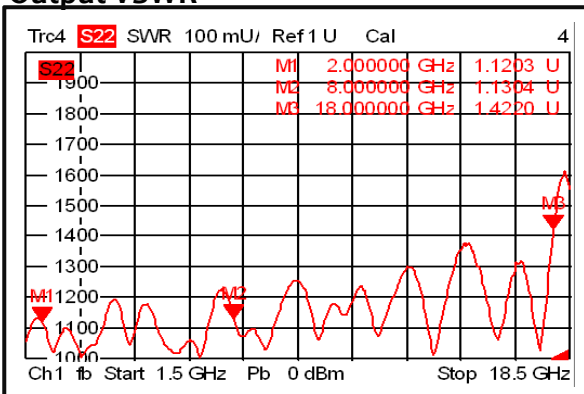
#### Loss & Amplitude Unbalance



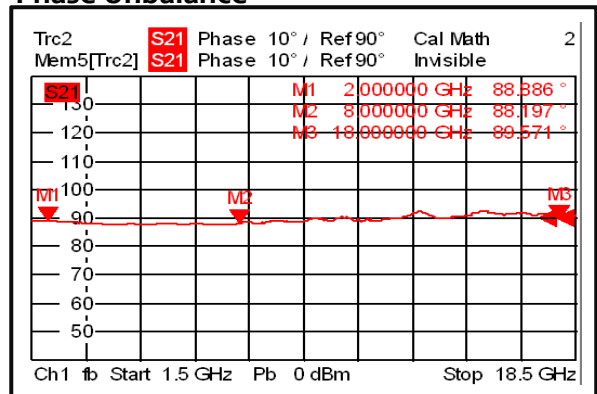
#### Input VSWR



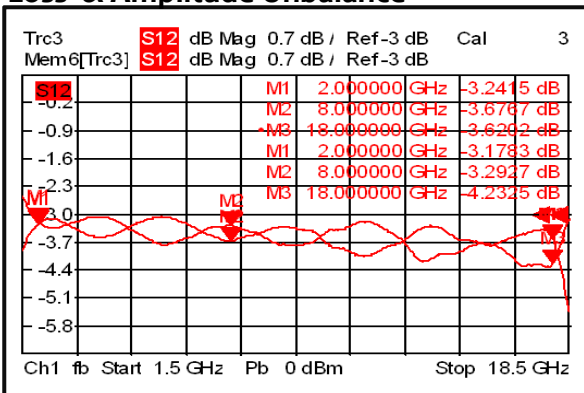
#### Output VSWR



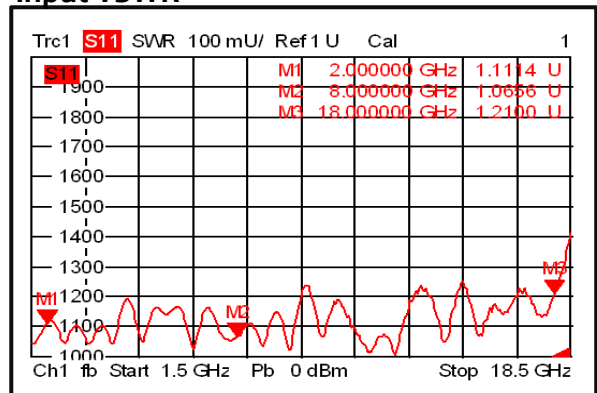
#### Phase Unbalance



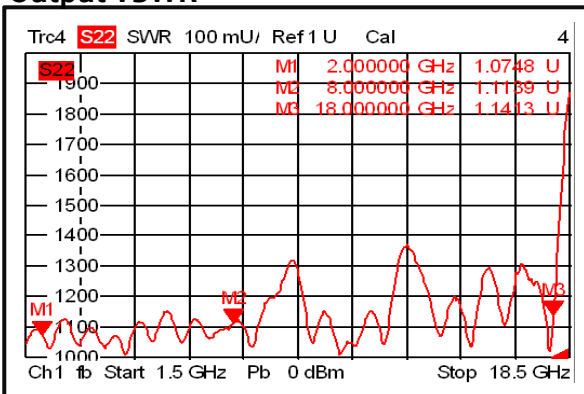
#### Loss & Amplitude Unbalance



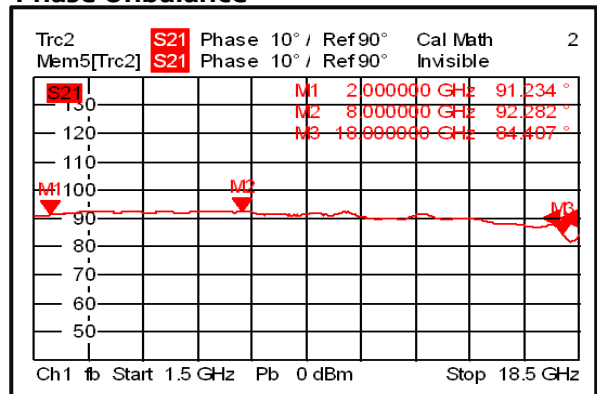
#### Input VSWR



#### Output VSWR



#### Phase Unbalance



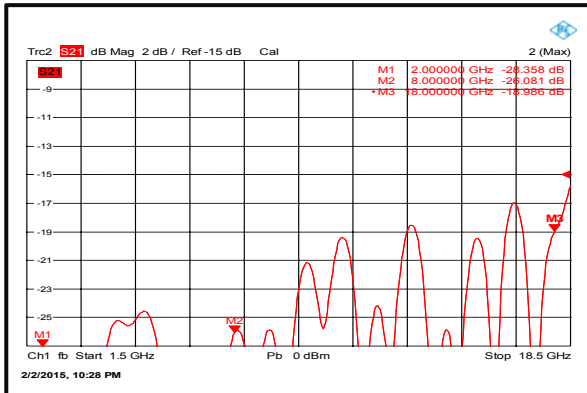


# RF-LAMBDA

The power beyond expectations

## RFHB02G18GVT

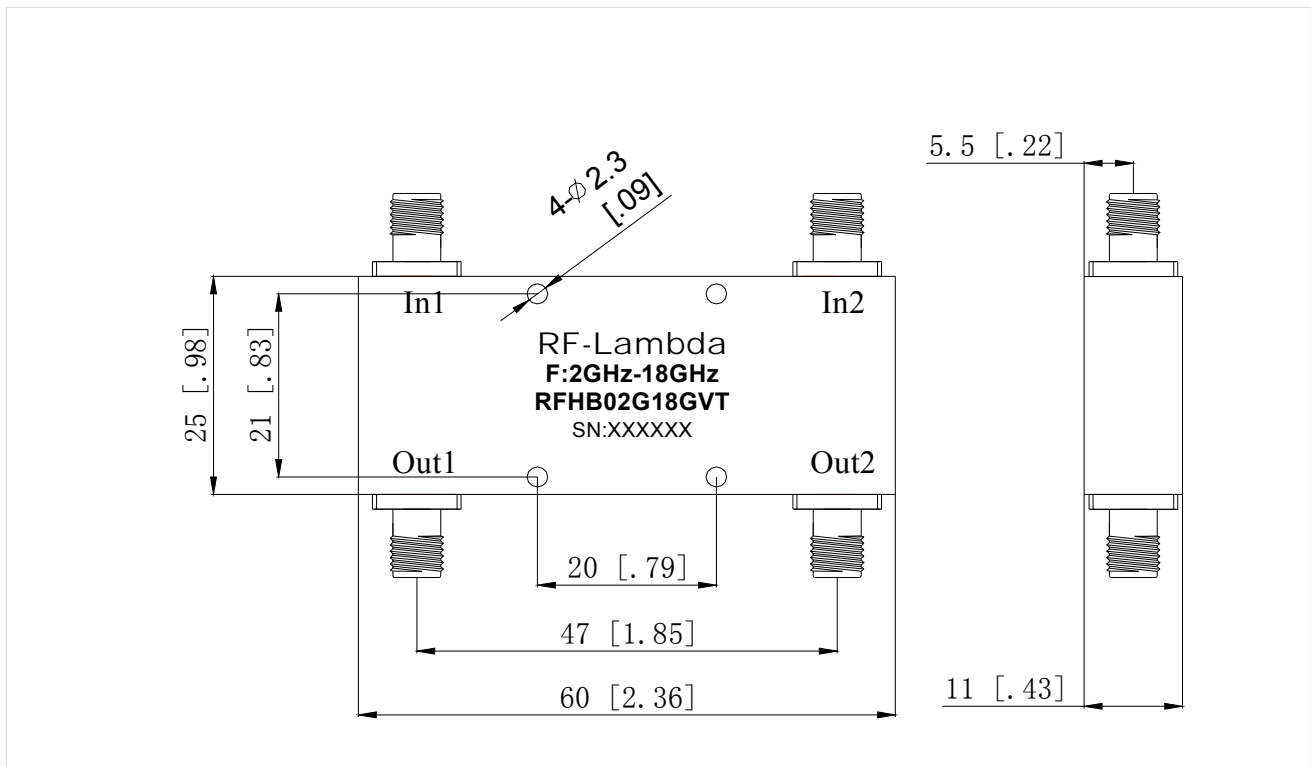
### Isolation



### Outline Drawing:

All Dimensions in mm (inches)

Tolerance  $\pm 0.25$  (0.01)



### Important Notice

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Coaxial 50W 2.0-18GHz 90° Hybrid Coupler