



Coaxial 50W 2 - 4GHz 90° Hybrid Coupler



Features

- High power handling capability up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- Aerospace and military applications
- High peak to average handling capability
- All specifications can be modified upon request

Electrical Specifications

Parameters		Min.	Typ.	Max.	Units
Frequency Range		2		4	GHz
Nominal Coupling			3		dB
Insertion Loss			0.2	0.3	dB
Isolation		22	24		dB
Amplitude Imbalance			± 0.3	± 0.5	dB
Phase Imbalance			± 1.5	± 2	deg
VSWR			1.15	1.2	: 1
Power Rating	Average	50			W
	Peak	500			W
Impedance		50			Ohms
Weight		0.71			Ounces
Operating Temperature		-45 to +85			°C
Input / Output Connectors		SMA-Female			
Material		Aluminum			
Finishing		Blue paint			

Environmental Specifications

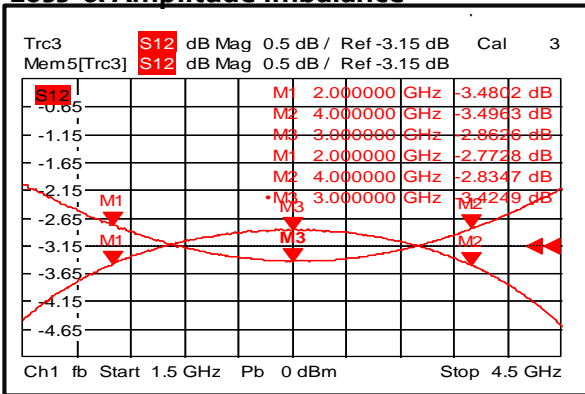
Operational Temperature	-45 to +85°C
Storage Temperature	-55 to +125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled Environment)
	60,000 ft 1.0psi min (Hermetically Sealed Un-controlled Environment) (Optional)
Vibration	25g RMS (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

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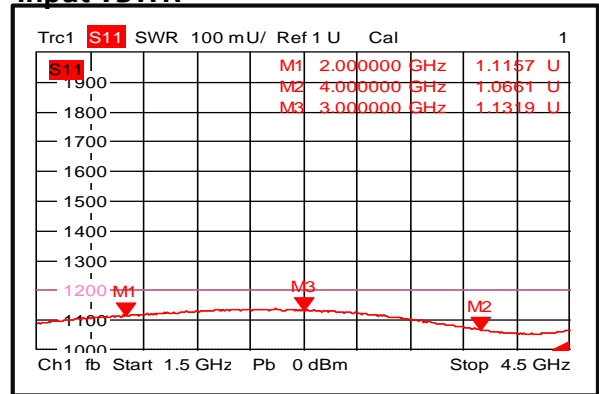


Typical Performance Plots

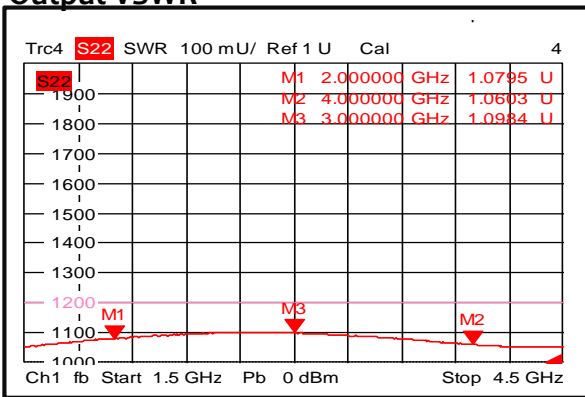
Loss & Amplitude Imbalance



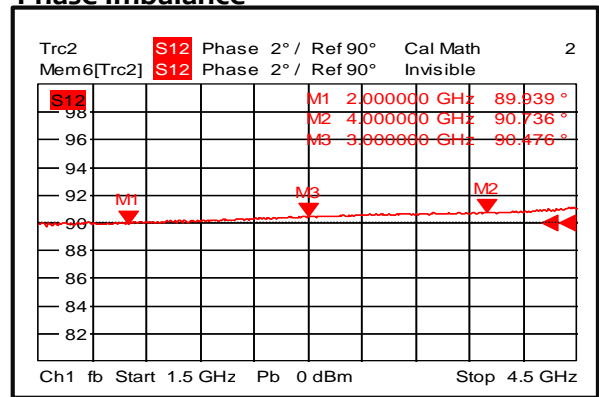
Input VSWR



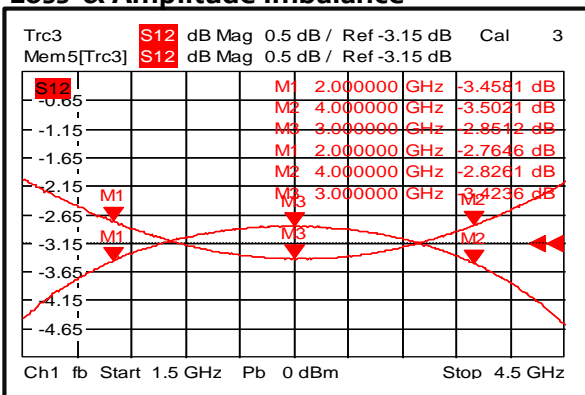
Output VSWR



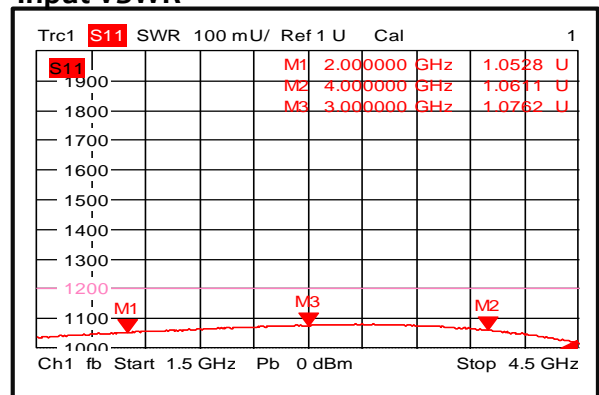
Phase Imbalance



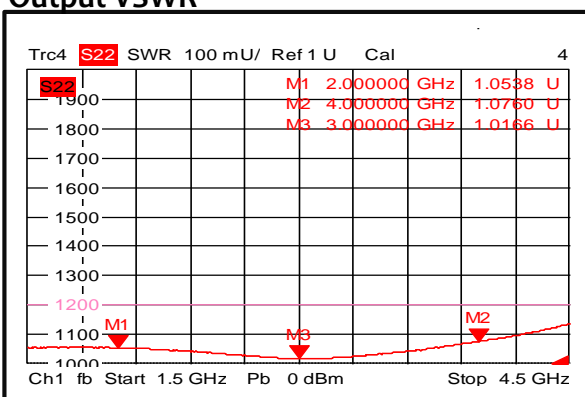
Loss & Amplitude Imbalance



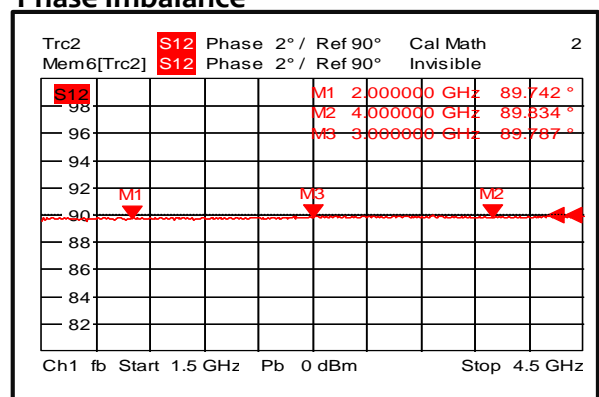
Input VSWR



Output VSWR

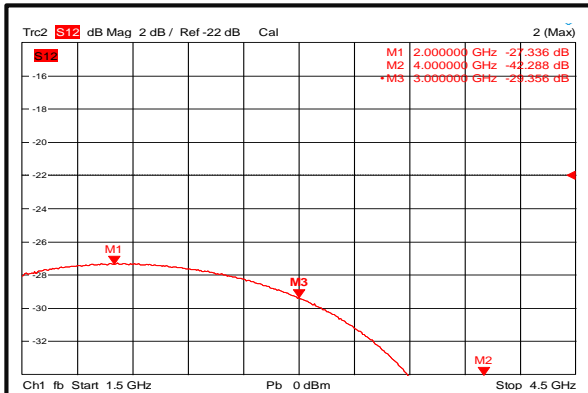


Phase Imbalance



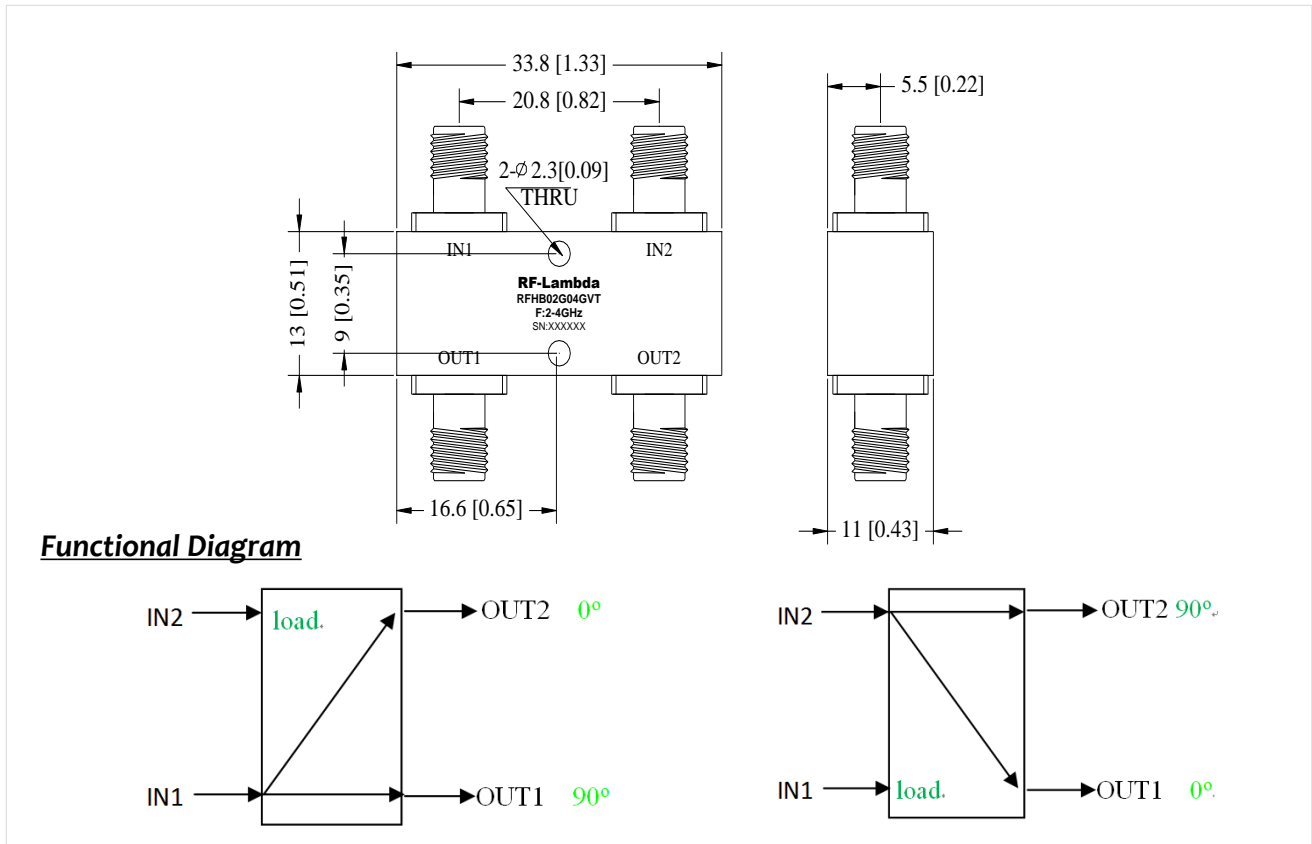


Isolation



Outline Drawing:

All Dimensions in mm [inches]
Tolerances ± 0.2 [0.008]



Functional Diagram

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