



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFHB20G40GVK

Coaxial 20W 20 - 40GHz 90° Hybrid Coupler



Features

- High power handling capability up to 20W
- 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		20		40	GHz
Nominal Coupling			3		dB
Insertion Loss			1.6	2.0	dB
Isolation		12	15		dB
Amplitude Imbalance			± 0.5	± 0.7	dB
Phase Imbalance			± 6	± 10	deg
VSWR			1.6	1.8	: 1
Power Rating	Average	20			W
	Peak	300			W
Impedance		50			Ohms
Weight		0.71			ounces
Operating Temperature		-45 to +85			°C
Input / Output Connectors		2.92-Female			
Material		Aluminum			
Finishing		Blue paint			

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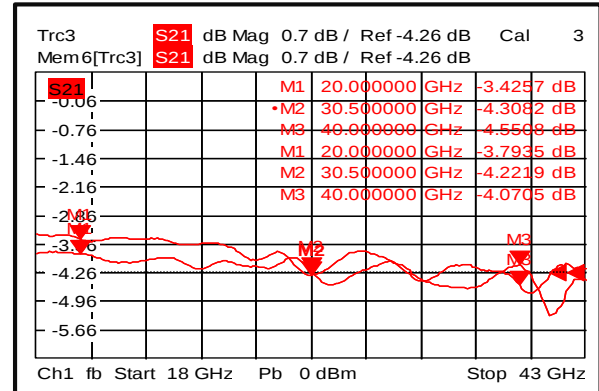
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Environmental Specifications

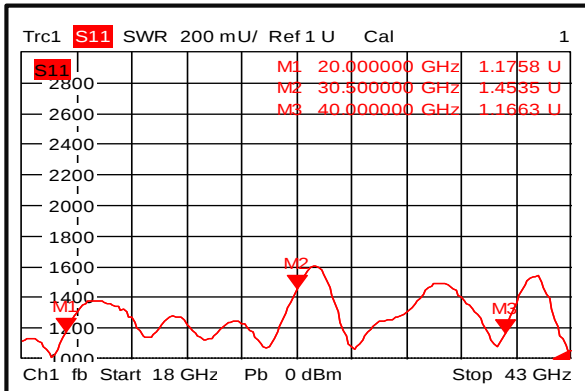
Operational Temperature	-45 ~ +85°C
Storage Temperature	-55 ~ +125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled Environment)
	60,000 ft 1.0psi min (Hermetically Sealed Un-controlled Environment) (Optional)
Vibration	25g RMS (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Typical Performance Plots

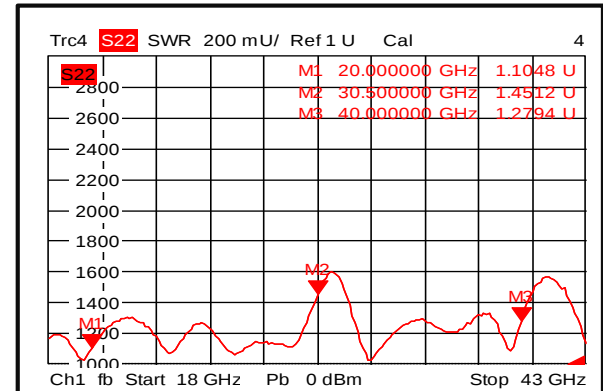
Loss & Amplitude Imbalance



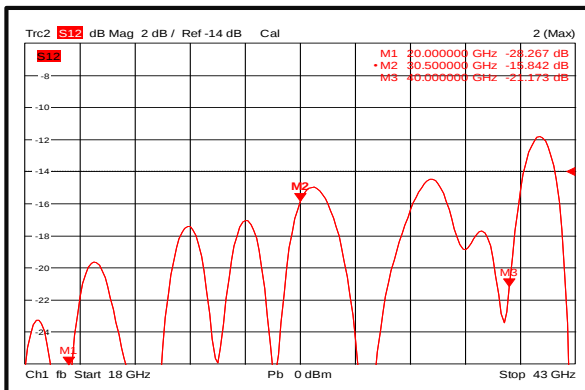
Input VSWR



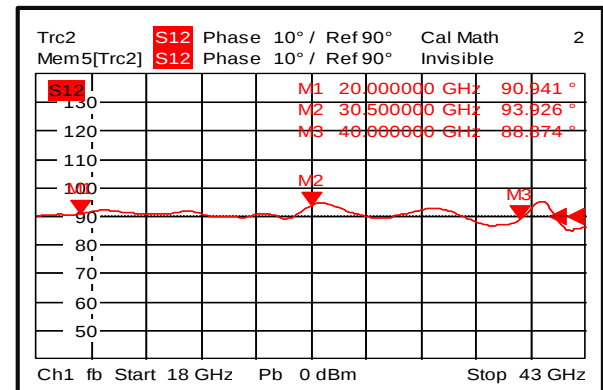
Output VSWR



Isolation



Phase Imbalance



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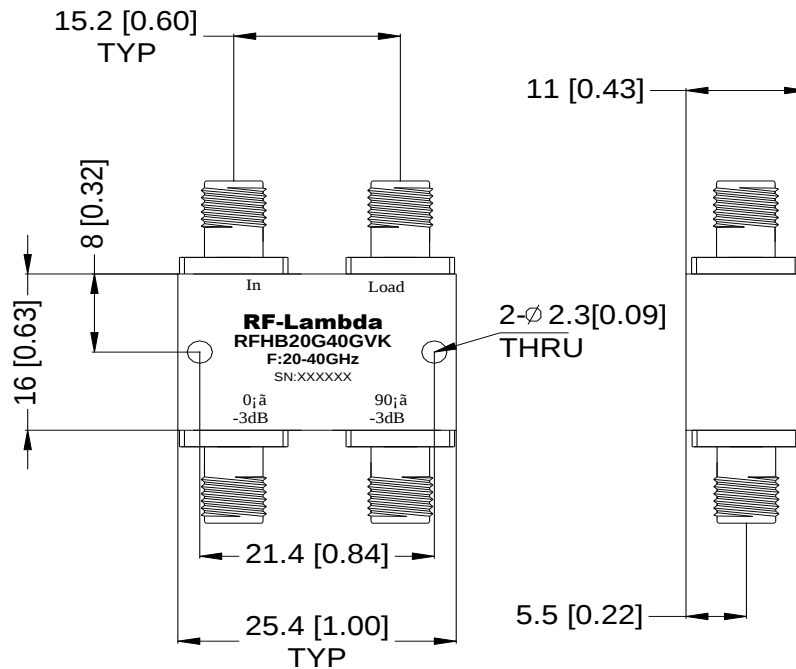
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.2 [0.008]



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