



# RF-LAMBDA

LEADER OF BROADBAND SOLUTIONS

RFDC2G40G20

## Coaxial 30W 2-40 GHz 20 dB Directional Coupler



- High power handle capability up to 30W
- Wide band operation
- High directivity 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		18	18		40	GHz
Nominal Coupling		19	20	21	19	20	21	dB
Frequency Sensitivity			±0.5	±1.0		±0.7	±1.0	dB
Directivity		12	14		10	12		dB
Insertion Loss (Excl Coupling)			0.7	1.0		1.0	1.5	dB
VSWR Primary			1.3	1.4		1.4	1.6	
VSWR Secondary			1.3	1.4		1.4	1.6	
Power Rating	Average	30						W
	Peak	300						W
Impedance		50						Ohms
Operating Temperature		-45 to +85						°C
Weight		1.25						ounces
Input / Output Connector		2.92mm-Female						
Material		Aluminum						
Finishing		Gray Paint						

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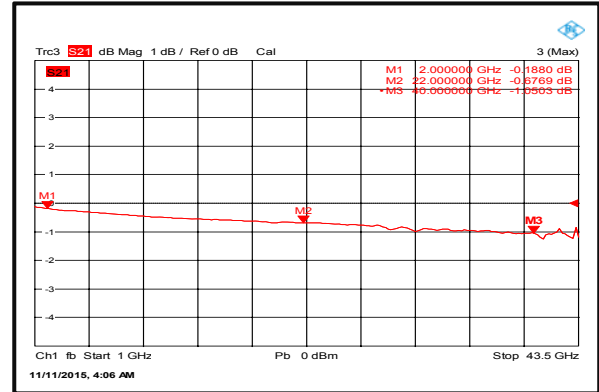
## RFDC2G40G20

### Environment specifications

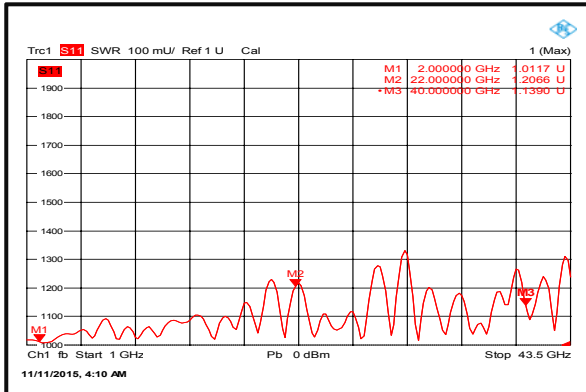
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) ( Optional )
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

### Typical Performance Plots

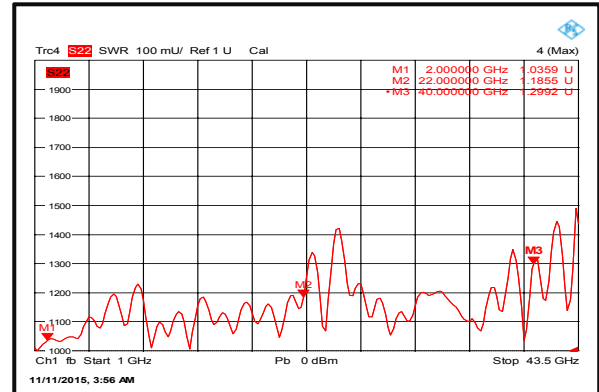
#### Insertion Loss



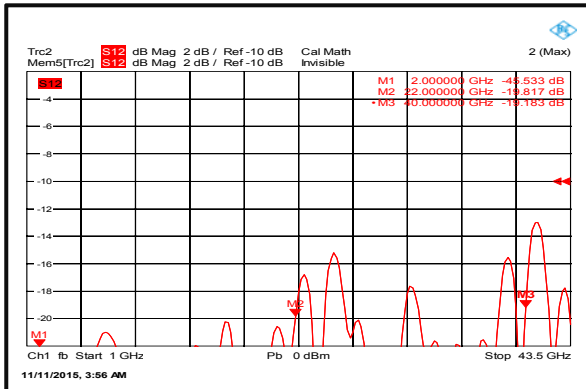
#### Primary VSWR



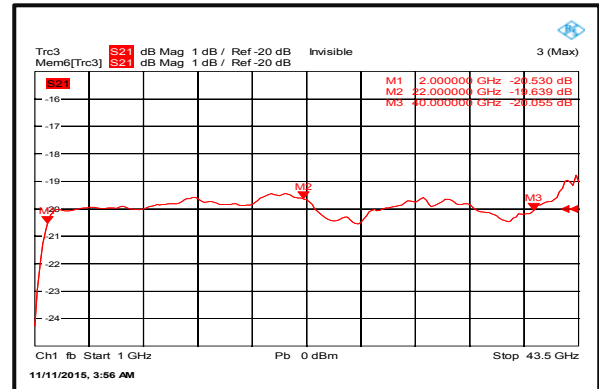
#### Secondary VSWR



#### Directivity



#### Nominal Coupling



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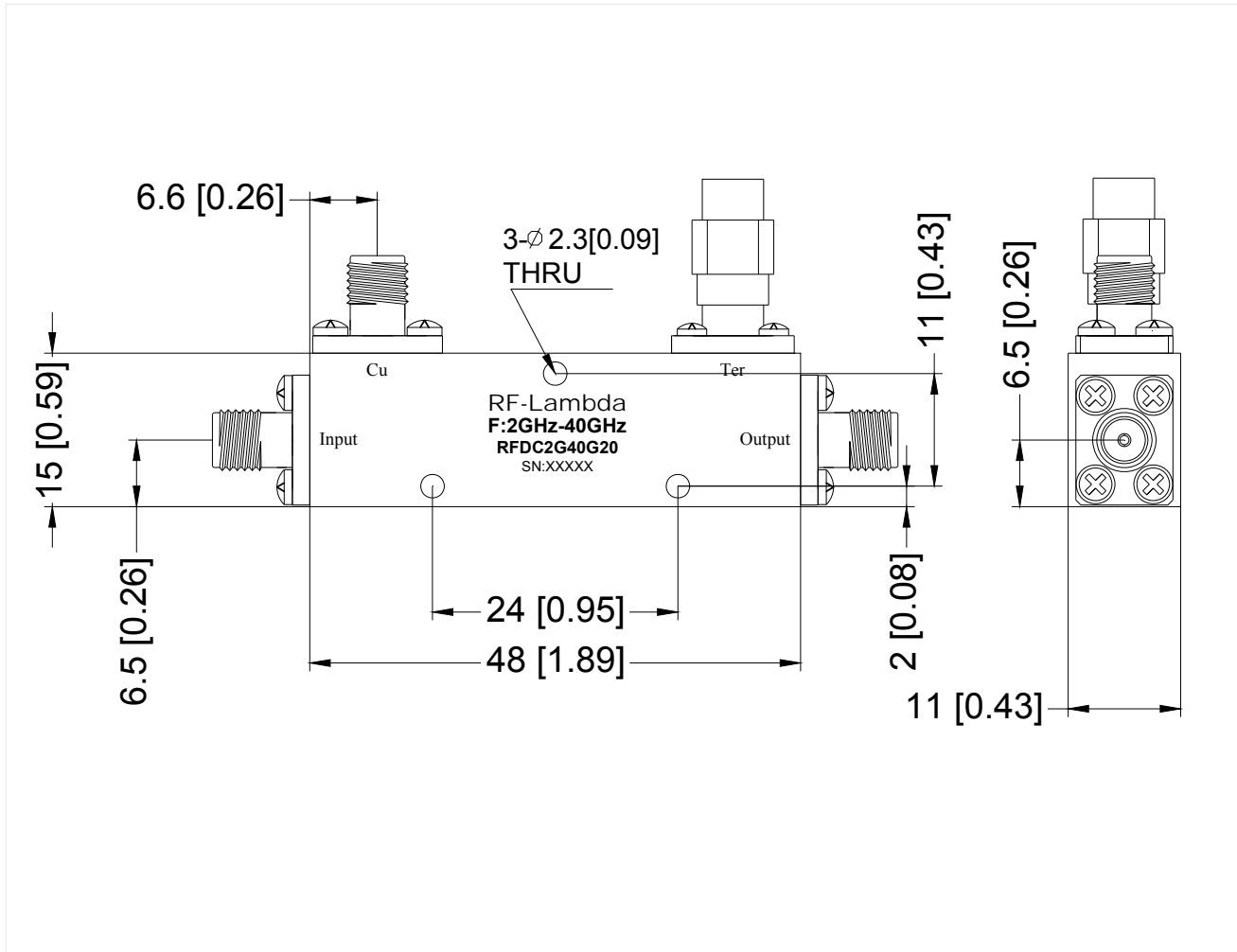
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### Outline Drawing:

All Dimensions in mm (inches)

Tolerance  $\pm 0.25$  (0.01)



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