



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFDC2G8G20N

Coaxial 50W 20dB Directional Coupler 2 - 8GHz



Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- High peak to average handling capability

Typical Applications

- Stable performance over temperature
- Aerospace and military applications
- LMDS multi-carrier operation

Electrical Specifications, $T_A=25\text{ }^{\circ}\text{C}$

Parameters		Min.	Typ.	Max.	Units
Frequency Range		2		8	GHz
Nominal Coupling		19	20	21	dB
Frequency Sensitivity			± 0.5	± 0.7	dB
Directivity		20	22		dB
Insertion Loss (Excl Coupling)				0.4	dB
Insertion Loss (true)			0.3	0.45	dB
VSWR Primary			1.25	1.3	:1
VSWR Secondary			1.25	1.3	:1
Power Rating	Average	50			W
	Peak	2			KW
Impedance		50			Ohms
Weight		3.17			Ounces
Input / Output Connectors		N-Female			
Material		Aluminum			
Finishing		Blue Paint			

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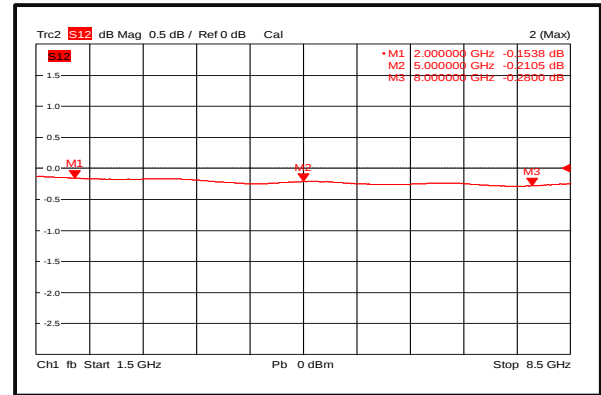
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Environmental Specifications

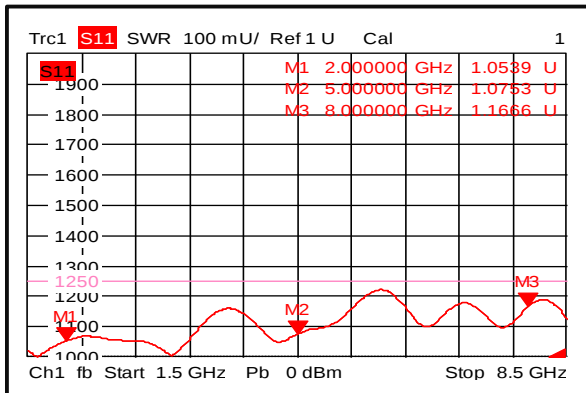
Operational Temperature(°C)	-45 to +85
Storage Temperature(°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

Typical Performance Plots

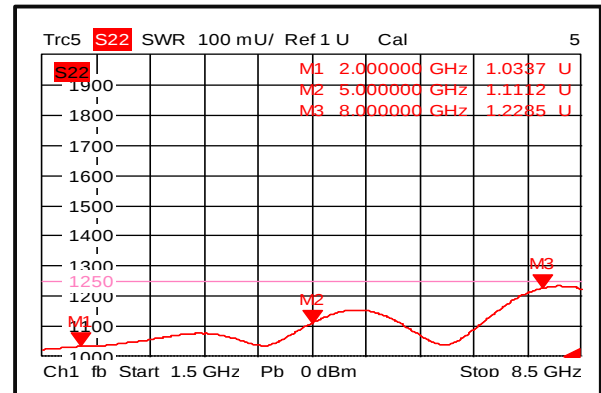
Insertion Loss



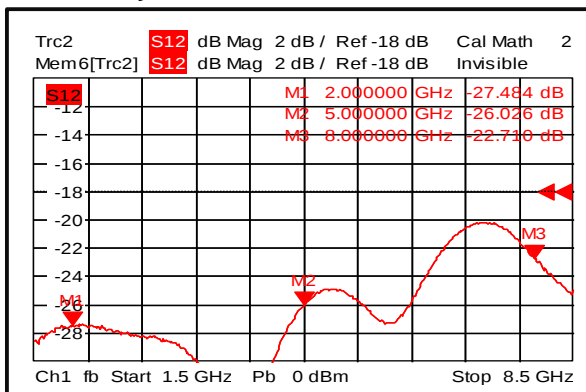
Primary VSWR



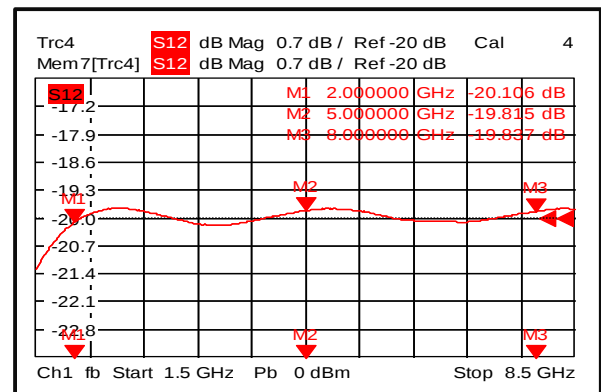
Secondary VSWR



Directivity



Nominal Coupling



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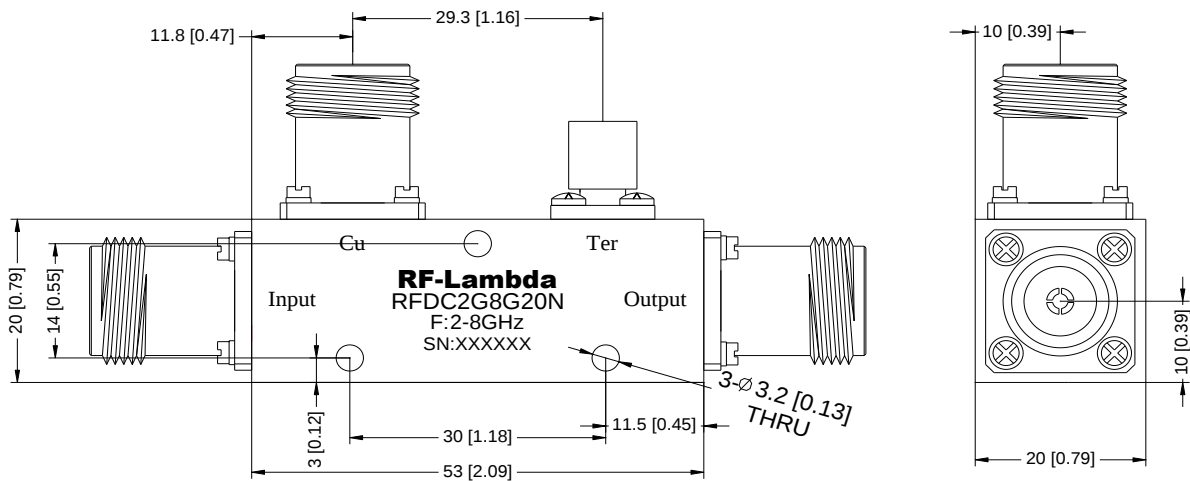
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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