



RF-LAMBDA

The power beyond expectations

RFDDC1M2G20

500W 0.11-2GHz 20dB Dual Directional Coupler



- High power handle capability up to 500W
- Ultra 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		0.11		0.4	0.4		2	GHz
Nominal Coupling		21	22	23.5	18.5	20	21.5	dB
Frequency Sensitivity			±0.7	±1		±0.7	±1	dB
Directivity		20	22		20	22		dB
Insertion Loss (Excl Coupling)			0.3	0.5		0.6	0.8	dB
VSWR Primary			1.2	1.25		1.2	1.25	
VSWR Secondary			1.2	1.25		1.2	1.25	
Power Rating	Average	500						W
	Peak	5						kW
Impedance		50						Ohms
Operating Temperature		-45 to +85						°C
Weight		200						g
Input / Output Connector		N-male/Female						
Material		Aluminum						
Finishing		Gray Paint						

Environment specifications

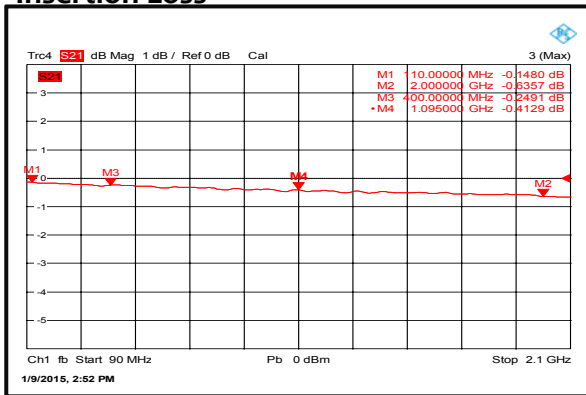
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Coaxial 500W 0.11-2GHz 20dB Dual Directional Coupler

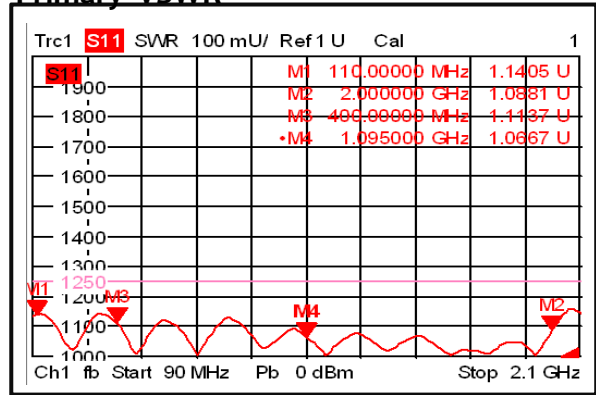


Typical Performance Plots

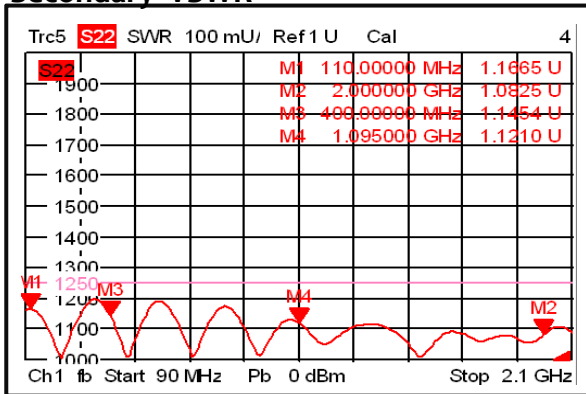
Insertion Loss



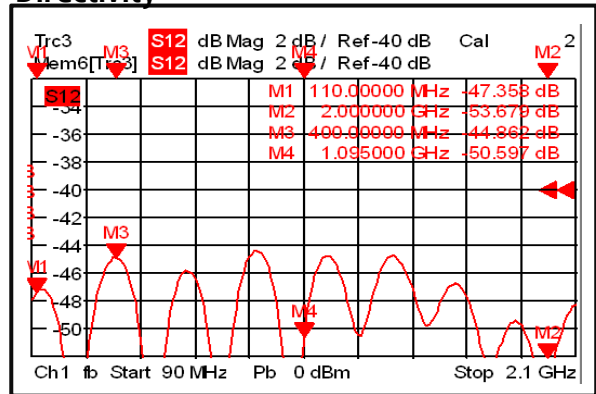
Primary VSWR



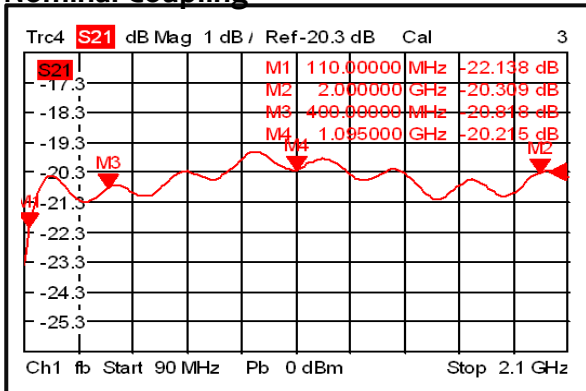
Secondary VSWR



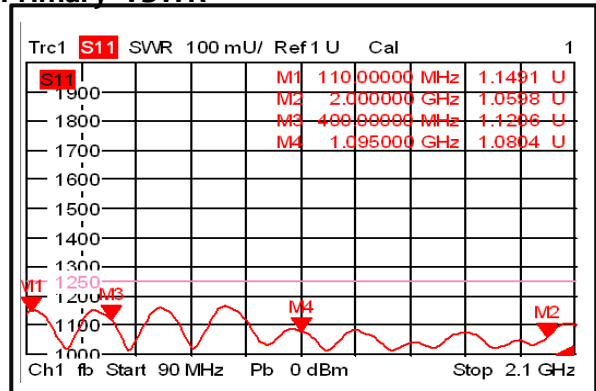
Directivity



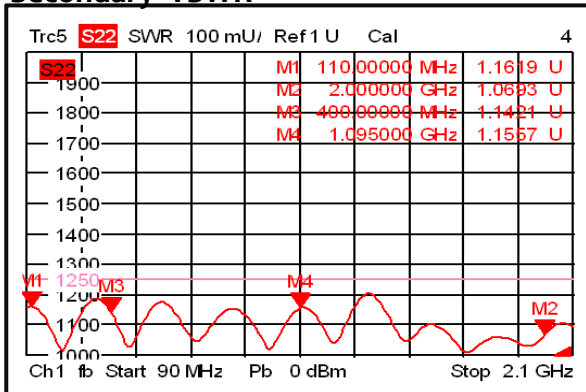
Nominal Coupling



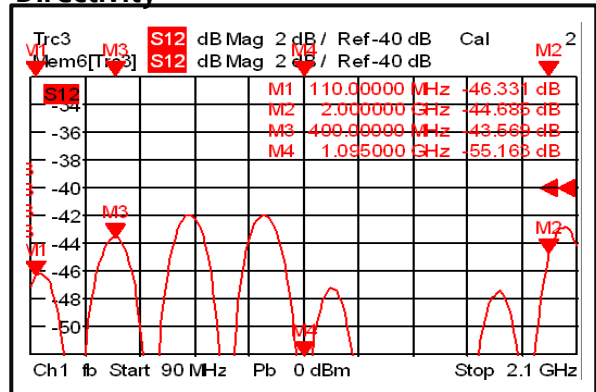
Primary VSWR



Secondary VSWR



Directivity





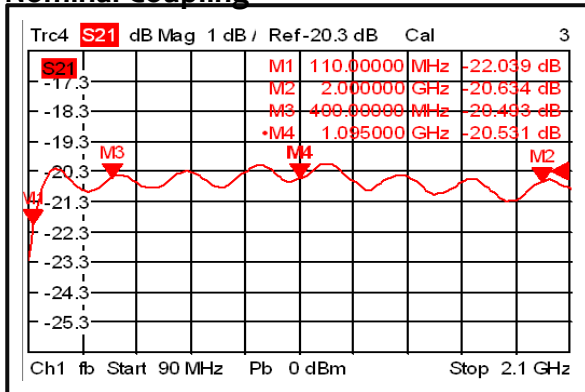
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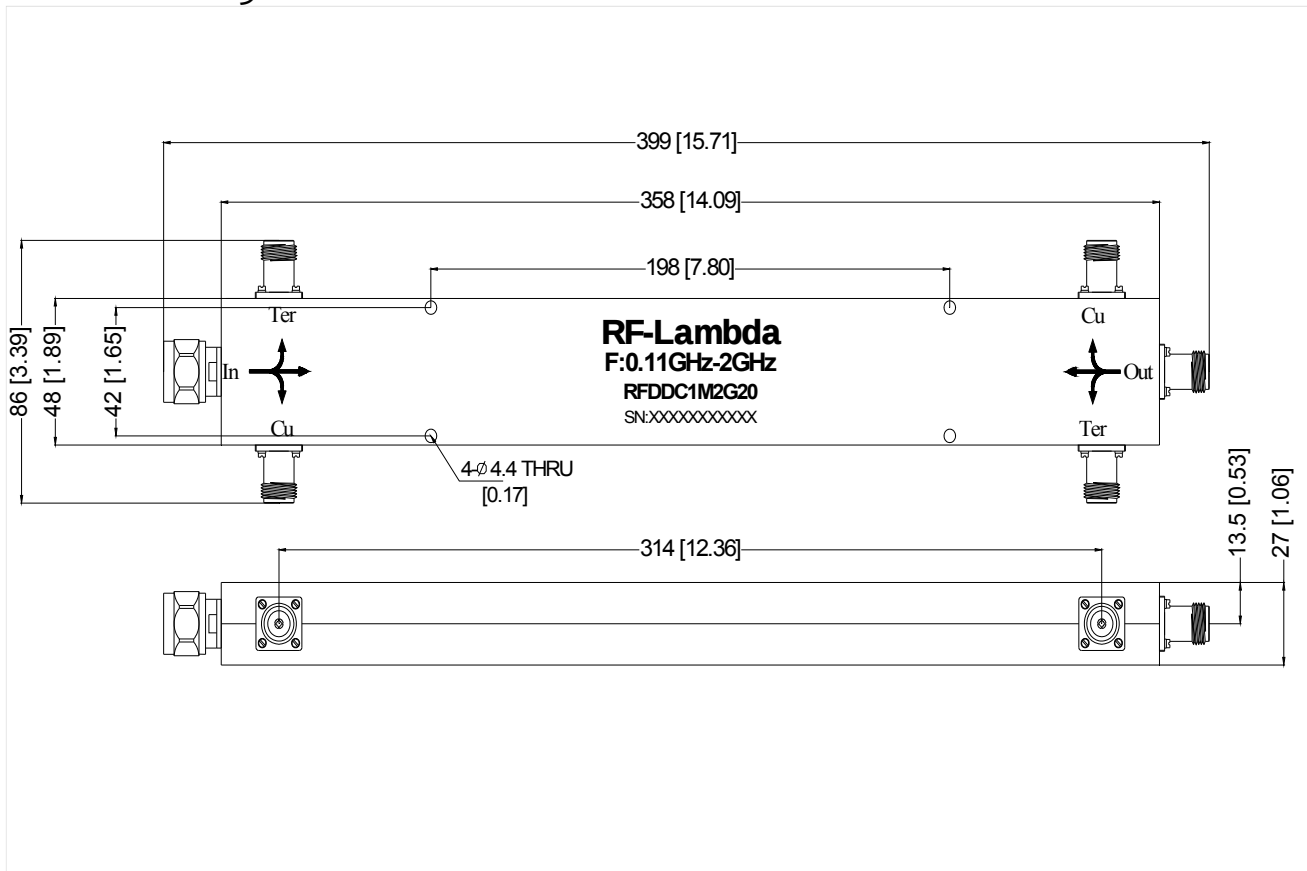
Nominal Coupling



Outline Drawing:

All Dimensions in mm (inches)

Tolerance ± 0.3 (0.012)



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