



500W 0.11-2GHz 20dB Dual Directional Coupler



Features

- High power handling capability up to 500W
- Ultra Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable over temperature performance
- Aerospace and military application
- LMDS multi-carrier operation
- High peak to average handling 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		1.15	1.25		1.15	1.25	: 1	
VSWR Secondary		1.15	1.25		1.15	1.25	: 1	
Power Rating	Average	500						W
	Peak	5						kW
Impedance	50						Ohms	
Operating Temperature	-45 to +85						°C	
Weight	47.3						ounces	
Input / Output Connector	N-male/Female							
Material	Aluminum							
Finishing	Gray Paint							

Environmental Specifications

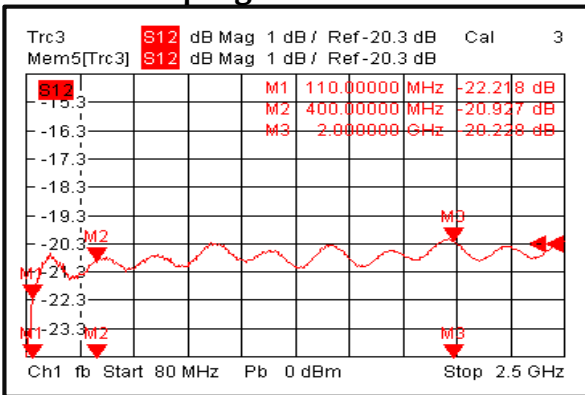
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

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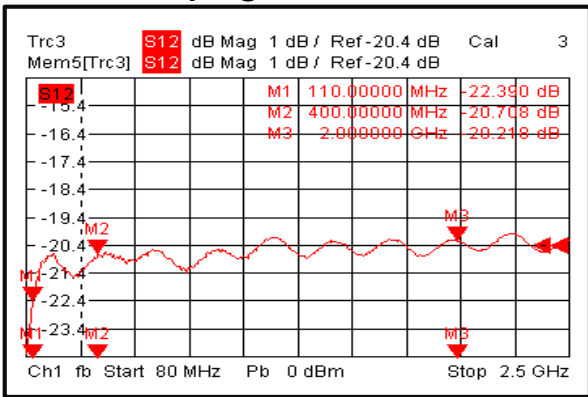


Typical Performance Plots

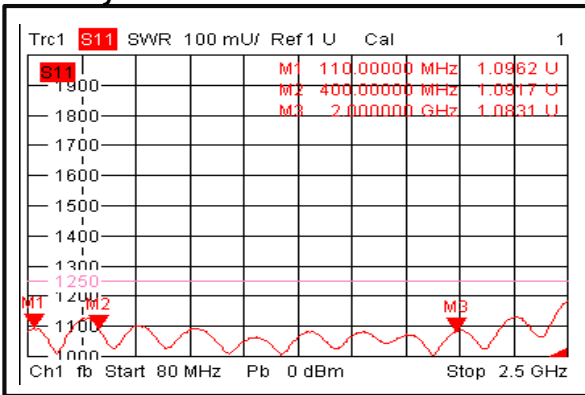
Nominal Coupling 1



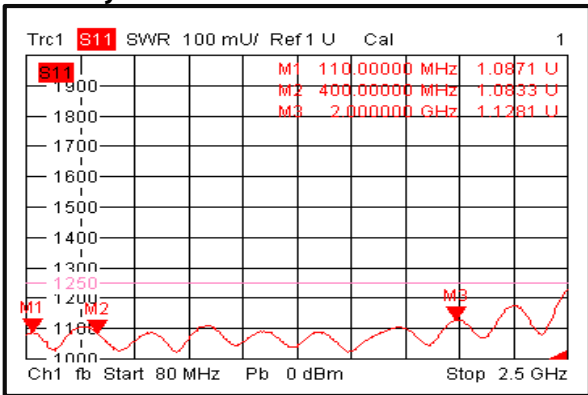
Nominal Coupling 2



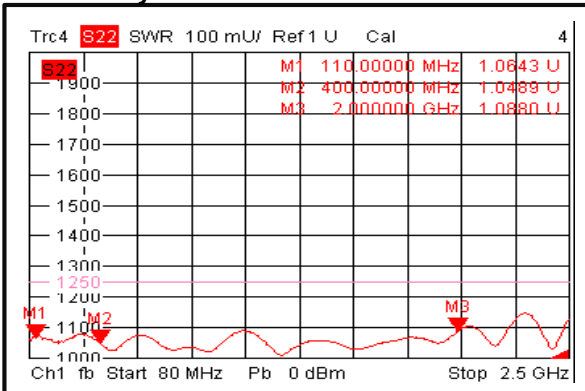
Primary VSWR 1



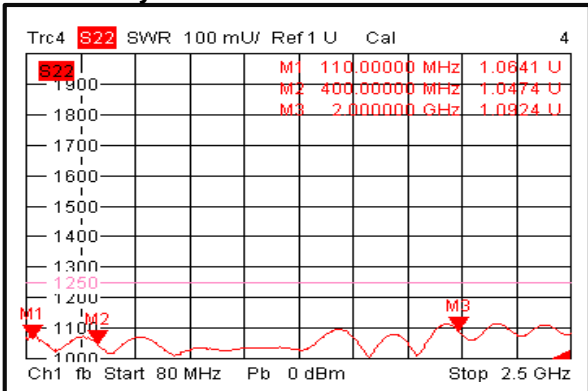
Primary VSWR 2



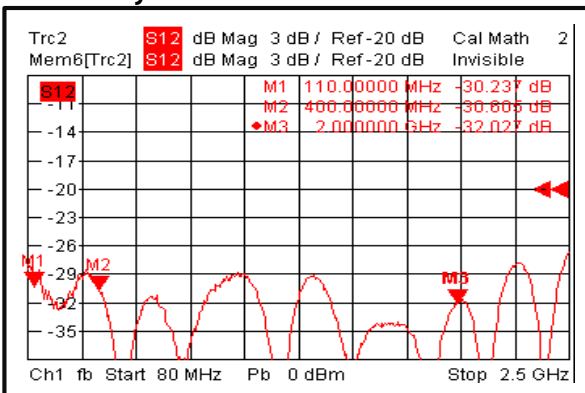
Secondary VSWR 1



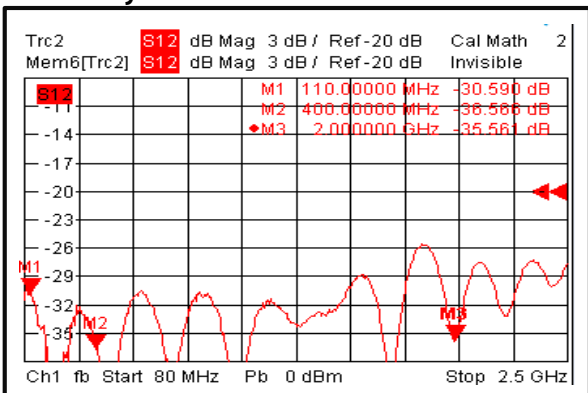
Secondary VSWR 2



Directivity 1



Directivity 2



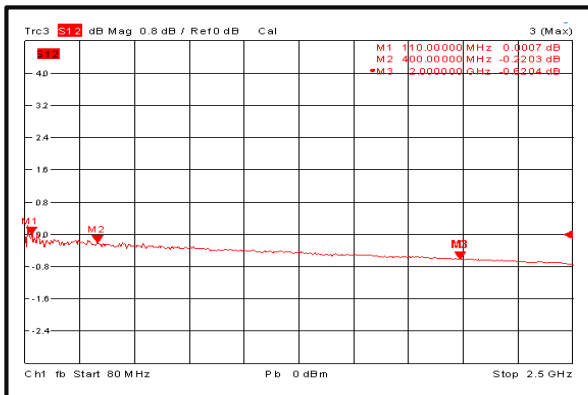


RF-LAMBDA

LEADER OF BROADBAND SOLUTIONS

RFDDC1M2G20

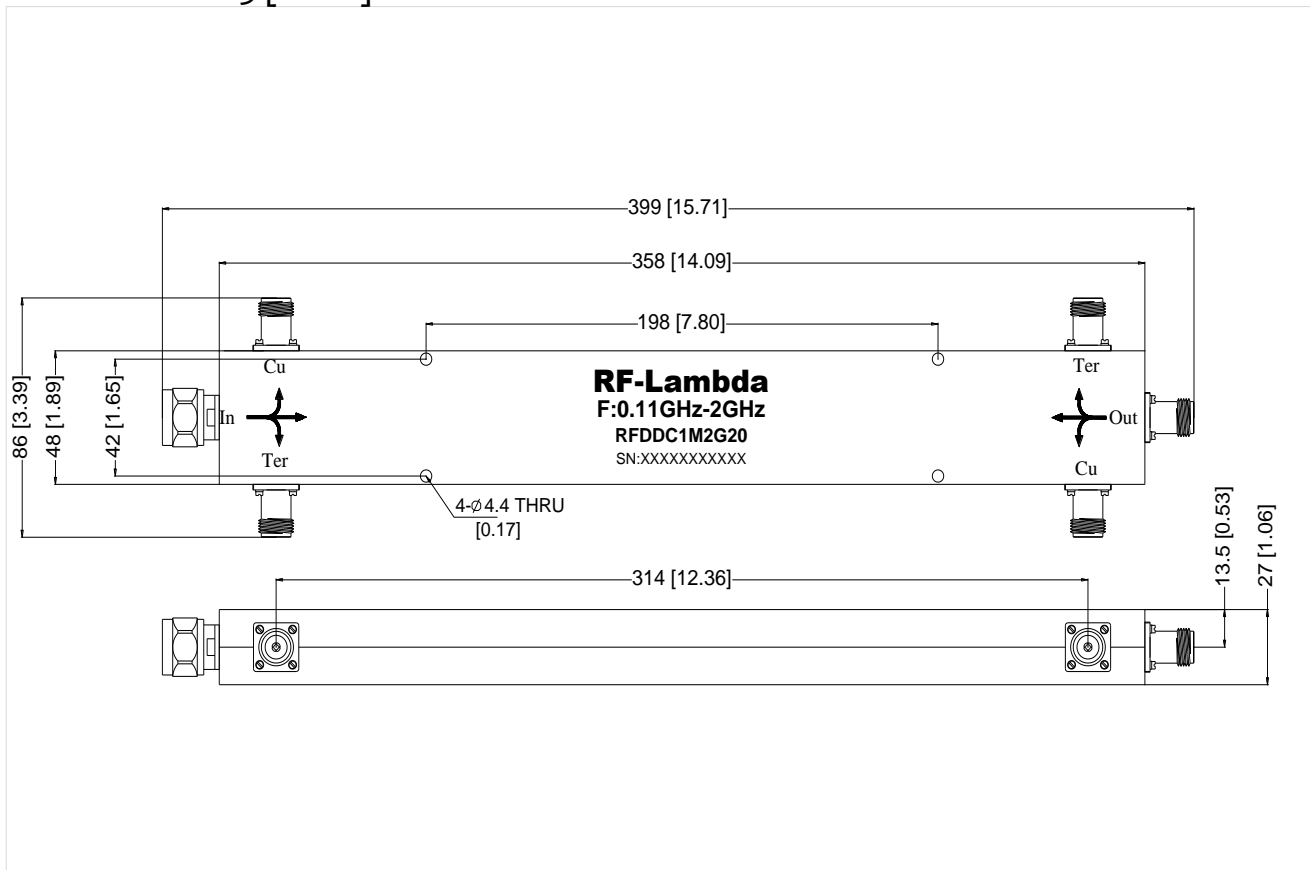
Insertion Loss



Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.3 [0.012]



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