



30W 1-40 GHz 30 dB Directional Coupler



Features

- High power handling capability up to 30W
- Ultra Wide band operation
- High directivity 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.	Min.	Typ.	Max.	Units
Frequency Range	1		8	8		18	18		40	GHz
Nominal Coupling	29	30	31.5	29	30	31	29	30	31	dB
Frequency Sensitivity		±0.8	±1.0		±0.6	±1.0		±0.6	±1.0	dB
Directivity	15	18		12	14		10	12		dB
Insertion Loss (Excl Coupling)		0.6	1.0		0.9	1.2		1.5	2.0	dB
VSWR Primary		1.25	1.3		1.3	1.5		1.4	1.6	:1
VSWR Secondary		1.25	1.3		1.3	1.5		1.4	1.6	:1
Power Rating	Average	30								W
	Peak	300								W
Impedance	50								Ohms	
Operating Temperature	-45 to +85								°C	
Weight	2.46								ounces	
Input / Output Connector	2.92mm-Female									
Material	Aluminum									
Finishing	Gray Paint									

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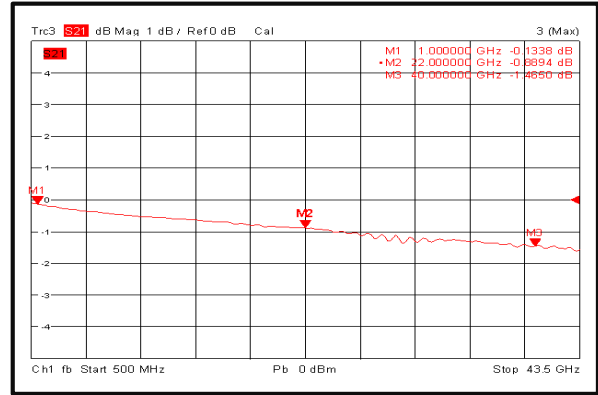


Environmental Specifications

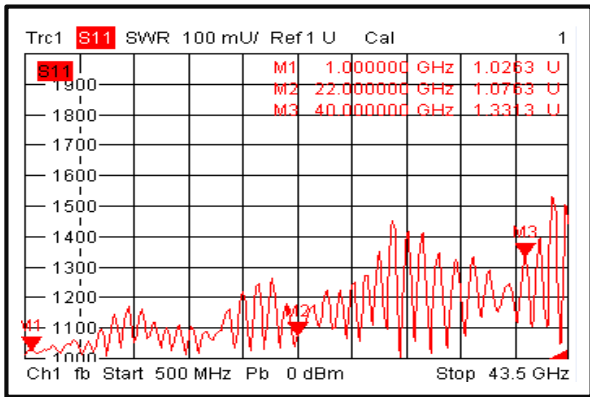
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Typical Performance Plots

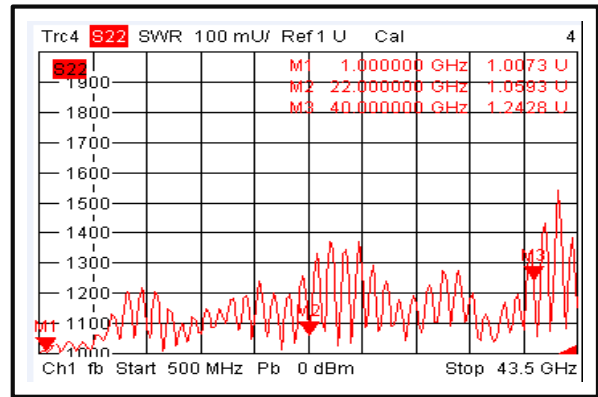
Insertion Loss



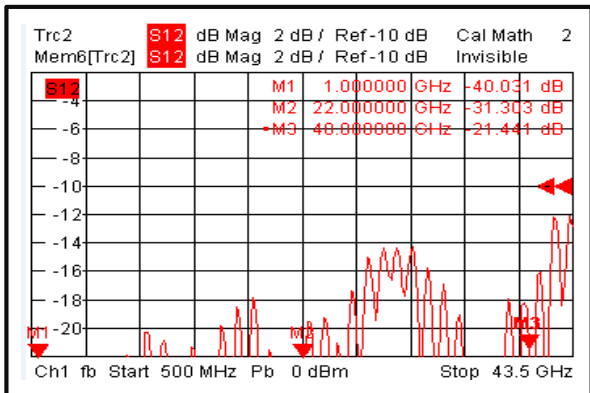
Primary VSWR



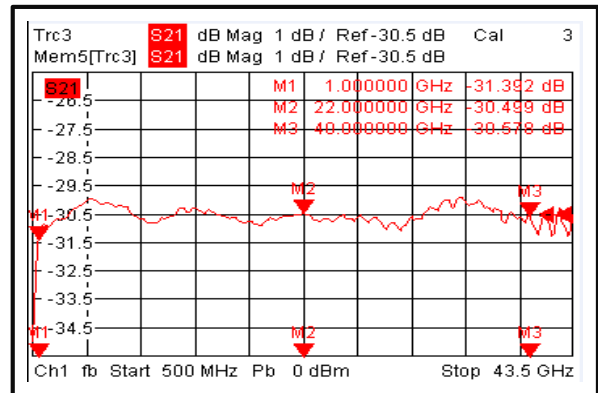
Secondary VSWR



Directivity



Nominal Coupling

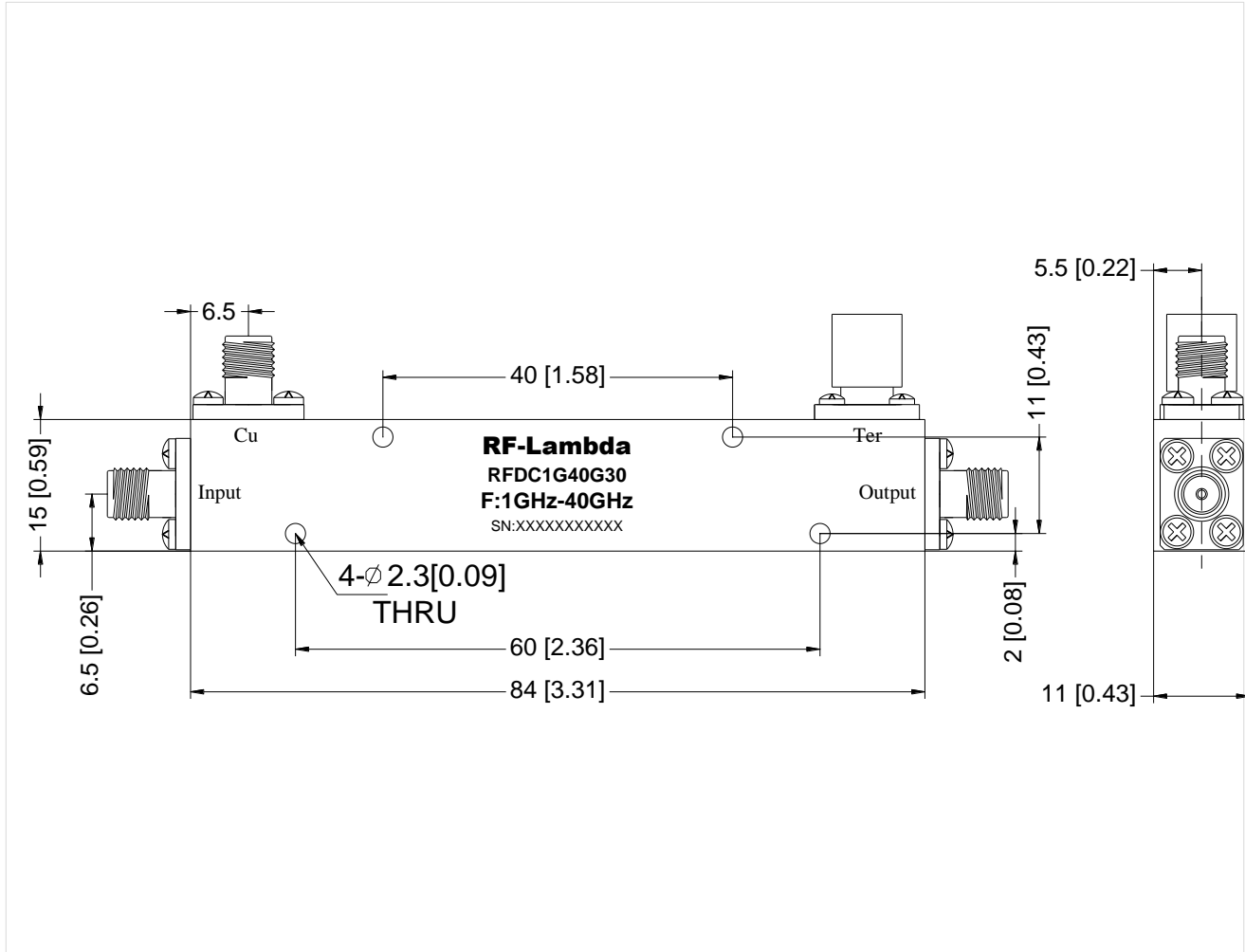




Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.2 [0.008]



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