

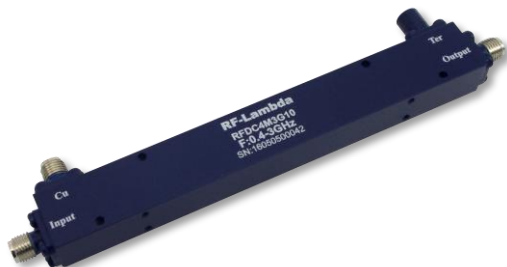


RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFDC4M3G10

50 W 0.4 - 3 GHz 10dB Directional Coupler



Features

- High power handling capability up to 50W
- 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		0.4		1	1		3	GHz
Nominal Coupling		9	10	11	9	10	11	dB
Frequency Sensitivity			±0.7	±1.0		±0.5	±0.7	dB
Directivity		20	23		20	22		dB
Insertion Loss (Excl Coupling)			0.3	0.4		0.4	0.5	dB
VSWR Primary			1.1	1.2		1.15	1.2	: 1
VSWR Secondary			1.1	1.2		1.15	1.2	: 1
Power Rating	Average	50						W
	Peak	500						W
Impedance		50						Ohms
Operating Temperature		-45 to +85						°C
Weight		2.12						ounces
Input / Output Connector		SMA-Female						
Material		Aluminum						
Finishing		Blue Paint						

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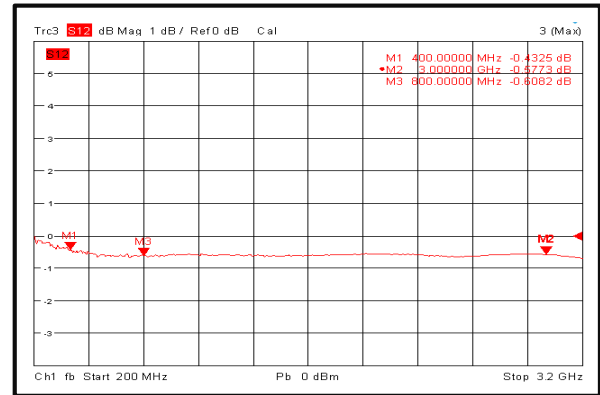
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Environmental Specifications

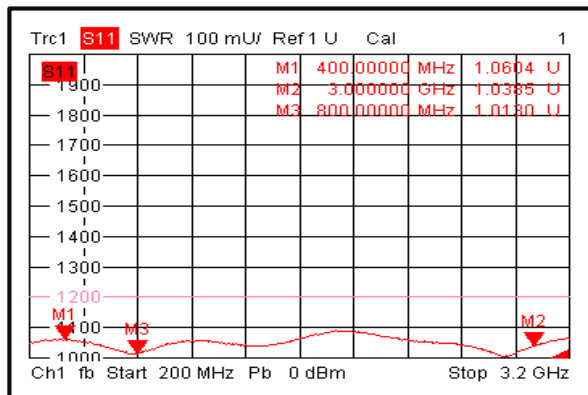
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Typical Performance Plots

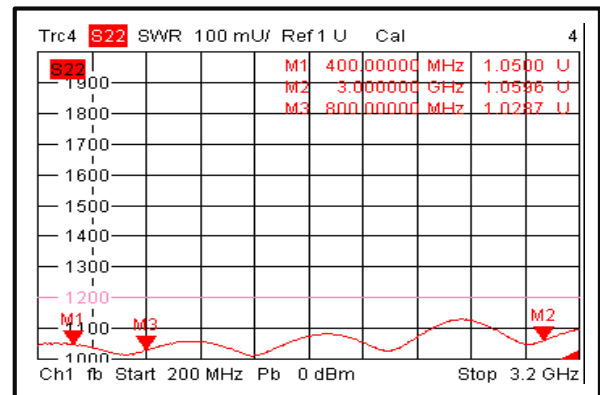
Insertion Loss



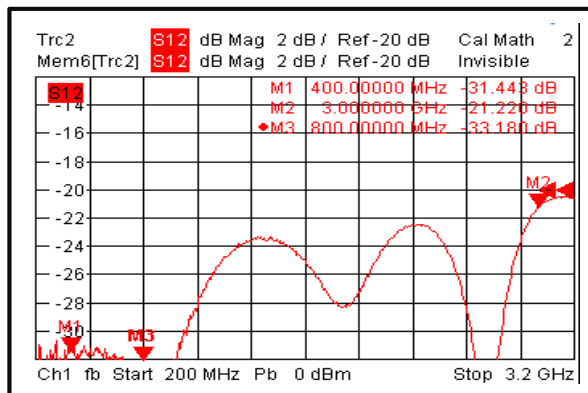
Primary VSWR



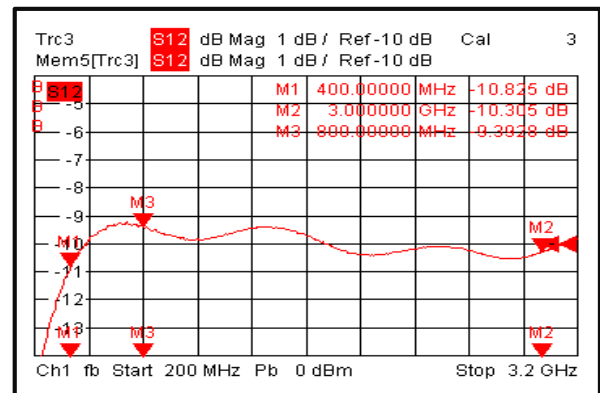
Secondary VSWR



Directivity



Nominal Coupling



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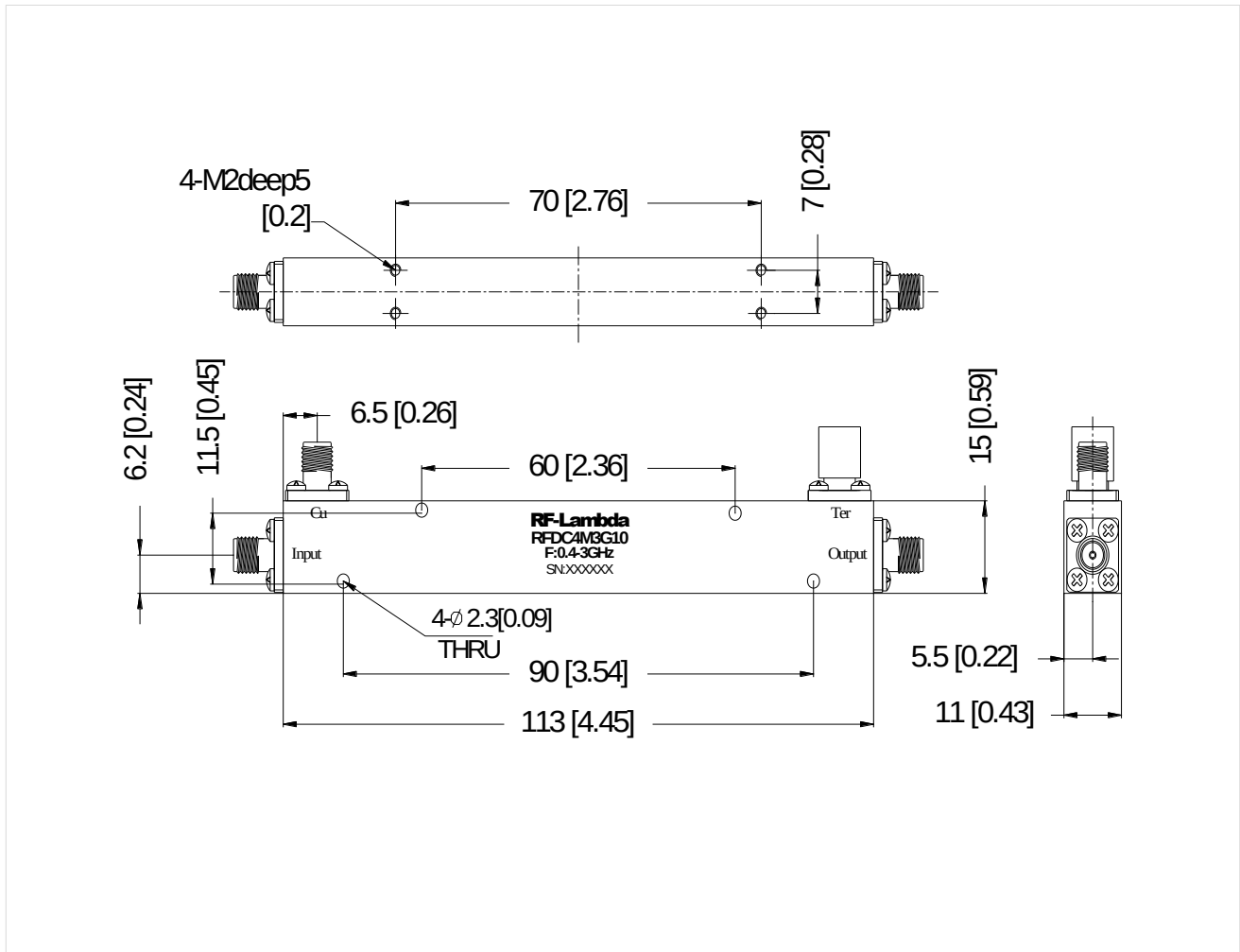
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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