



### Coaxial 50W 30dB Directional Coupler 0.5 - 2GHz



#### Features

- High power handling up to 50 W
- Ultra 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.	Min.	Typ.	Max.	Units
Frequency Range		0.5		1	1		2	GHz
Nominal Coupling		29	30	31	29	30	31	dB
Frequency Sensitivity			$\pm 0.5$	$\pm 0.7$		$\pm 0.5$	$\pm 0.7$	dB
Directivity		20	24		20	22		dB
Insertion Loss (Excl Coupling)				0.2			0.3	dB
Insertion Loss (true)			0.15	0.25		0.2	0.3	dB
VSWR Primary			1.15	1.2		1.15	1.2	:1
VSWR Secondary			1.15	1.2		1.15	1.2	:1
Power Rating	Average	50						W
	Peak	2						KW
Impedance		50						Ohms
Weight		3						Ounces
Input / Output Connectors		SMA-Female						
Material		Aluminum						
Finishing		Blue Paint						

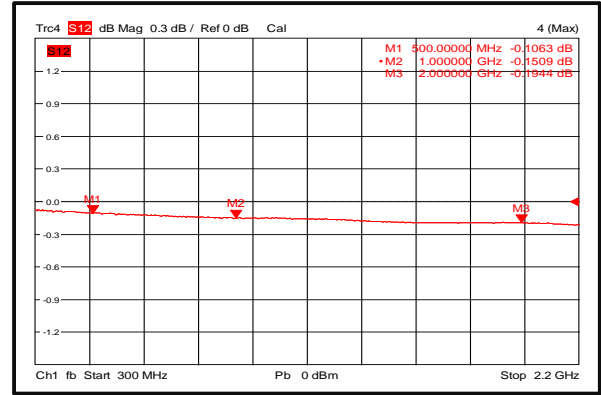


**Environmental Specifications**

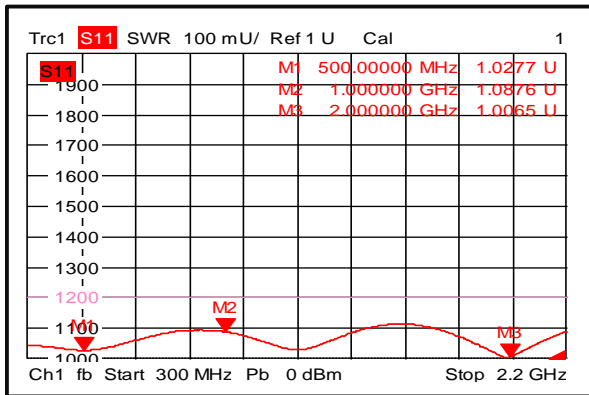
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-55 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

**Typical Performance Plots**

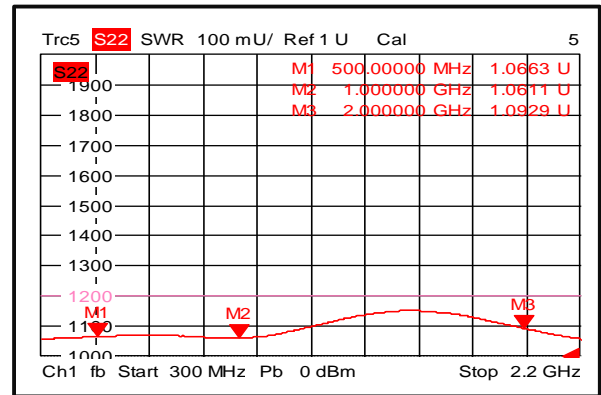
**Insertion Loss**



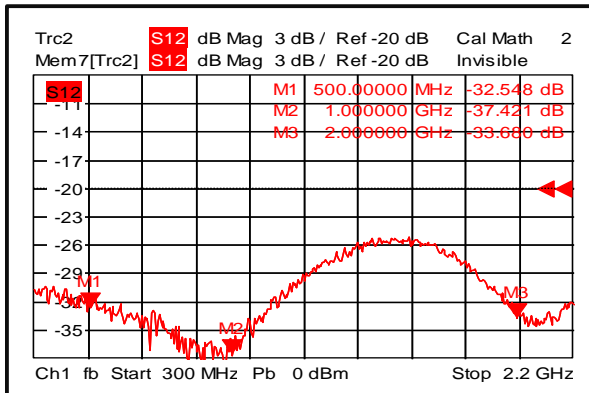
**Primary VSWR**



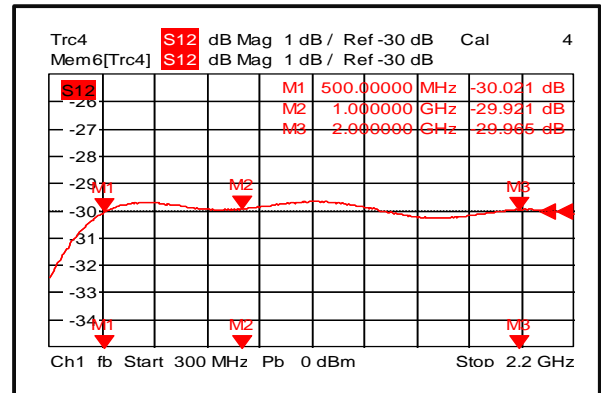
**Secondary VSWR**



**Directivity**



**Nominal Coupling**



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# RF-LAMBDA

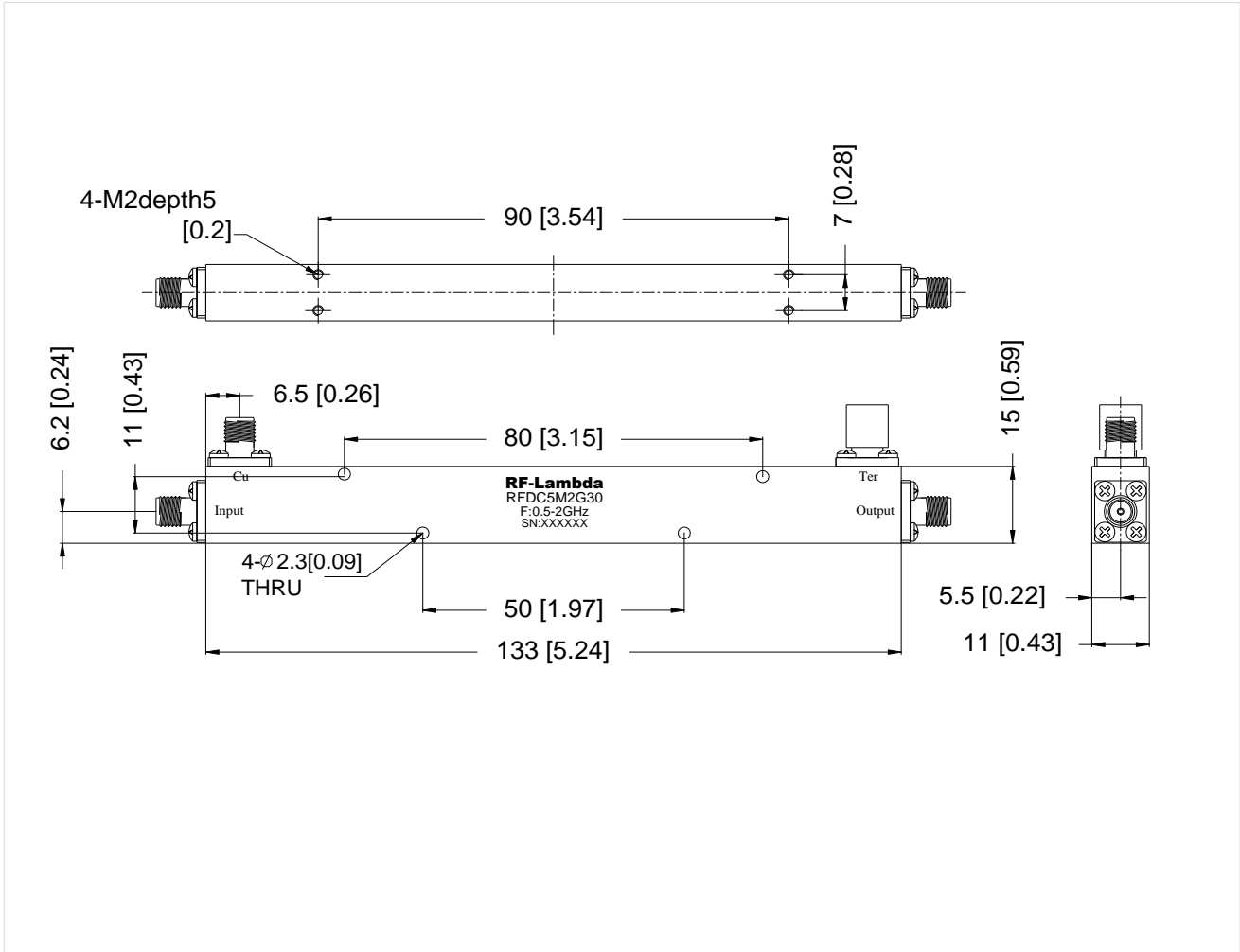
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## RFDC5M2G30

### Outline Drawing:

All Dimensions in mm [inches]

Tolerance  $\pm 0.25$  [0.01]



### Important Notice

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