



### Coaxial 100W 10dB Directional Coupler 0.4 - 3GHz



#### Features

- High power handling up to 100W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- High peak to average handling capability
- Stable performance over temperature

#### Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

#### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameters		Min.	Typ.	Max.	Units
Frequency Range		0.4		3	GHz
Nominal Coupling		9	10	11	dB
Frequency Sensitivity			$\pm 0.7$	$\pm 1.0$	dB
Directivity		20	22		dB
Insertion Loss (Excl Coupling)				0.5	dB
Insertion Loss (True)			0.8	1.0	dB
VSWR Primary			1.18	1.25	: 1
VSWR Secondary			1.18	1.25	: 1
Power Rating	Average	100			W
	Peak	2			KW
Impedance		50			Ohms
Weight		6.7			ounces
Input / Output Connectors		N-Female			
Material		Aluminum			
Finish		Blue Paint			

Coaxial 100W 10dB Directional Coupler 0.4 - 3GHz

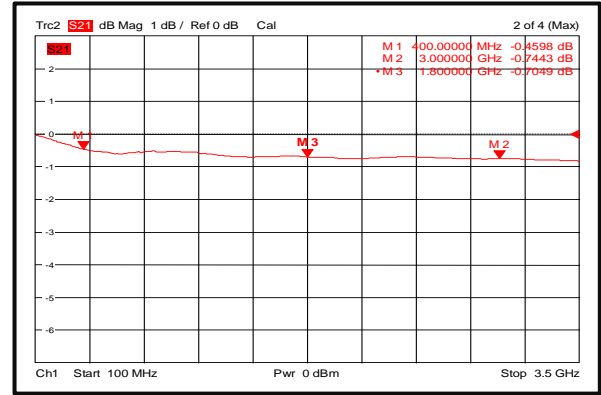


**Environmental Specifications**

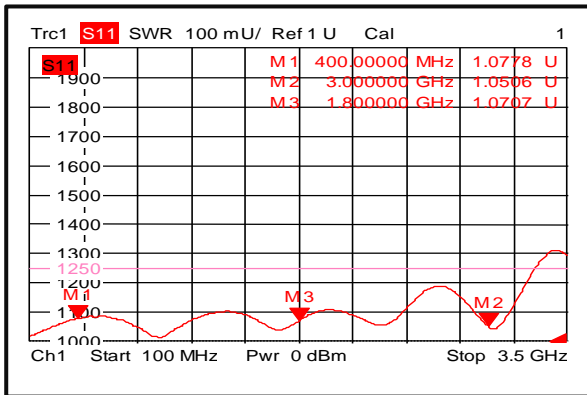
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

**Typical Performance Plots**

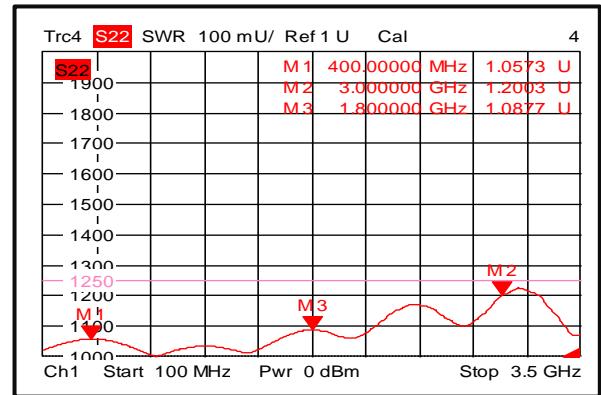
**Insertion Loss**



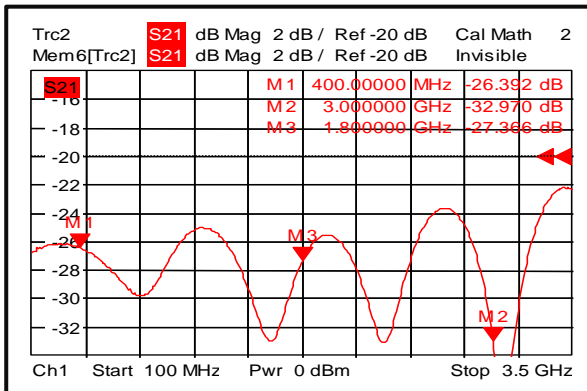
**Primary VSWR**



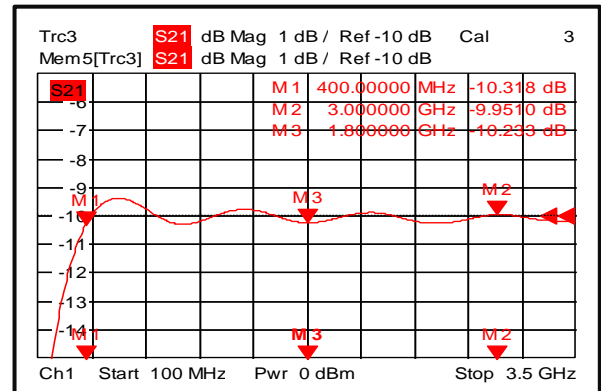
**Secondary VSWR**



**Directivity**



**Nominal Coupling**



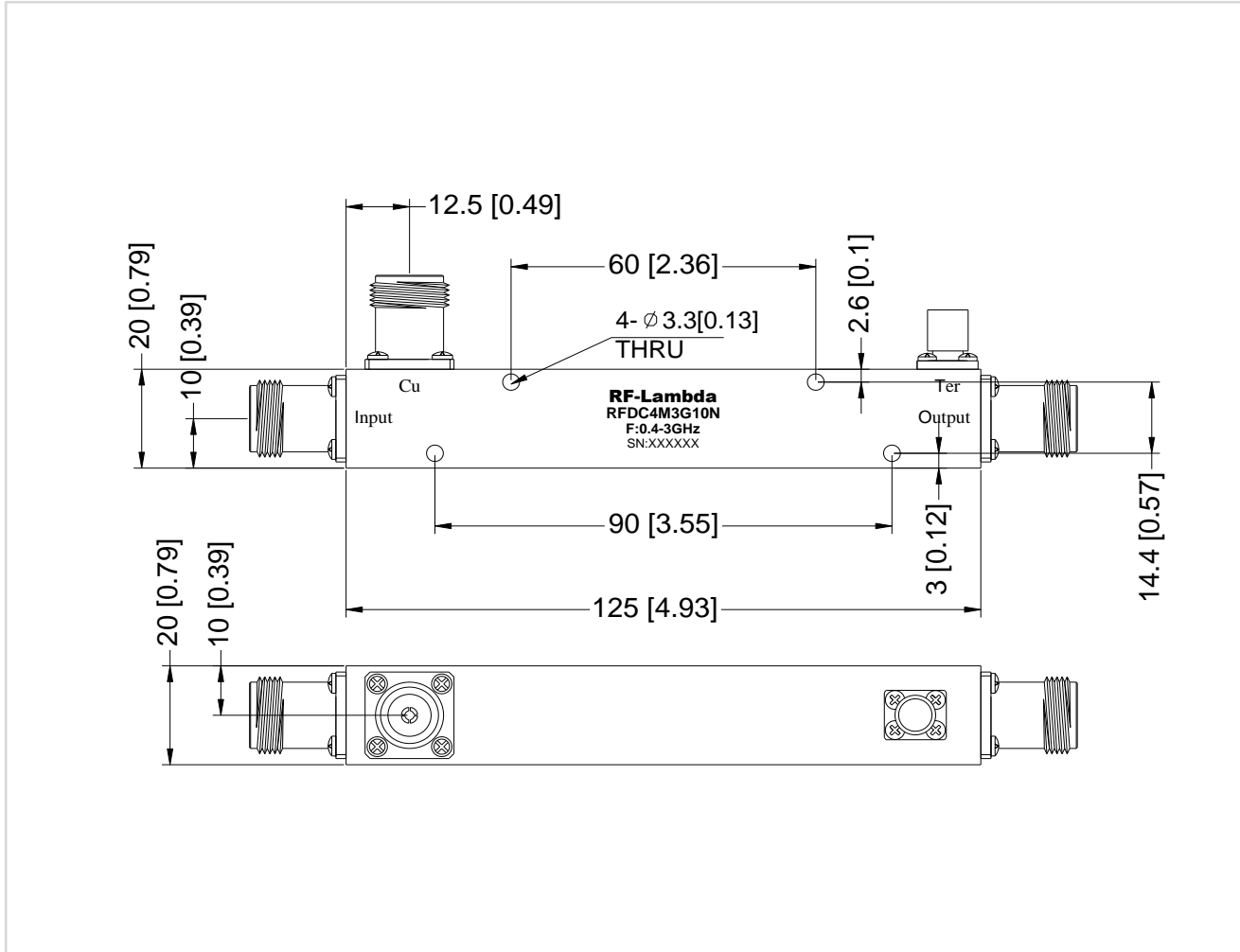
**Coaxial 100W 10dB Directional Coupler 0.4 - 3GHz**



### Outline Drawing:

All Dimensions in mm [inches]

Tolerance  $\pm 0.25$  [0.01]



Coaxial 100W 10dB Directional Coupler 0.4 - 3GHz

### Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.