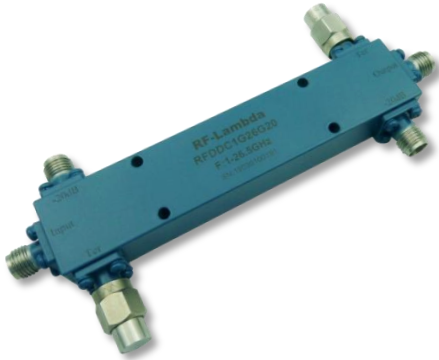




### Coaxial 30W 20dB Dual Directional Coupler 1 – 26.5GHz



#### Features

- High power handling up to 30W
- Ultra Wide band operation
- High directivity within operational band
- Low Insertion Loss
- High peak to average handling capability

#### Typical Applications

- Test and Measurement
- Aerospace and military applications
- Wireless Infrastructure



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

Parameter		Min.	Typ.	Max.	Units
Frequency Range		1		26.5	GHz
Nominal Coupling		18.5	20	21.5	dB
Frequency Sensitivity			$\pm 0.7$	$\pm 1.0$	dB
Directivity		10	14		dB
Insertion Loss (Excl Coupling)				1.9	dB
Insertion Loss (true)			1.3	2.0	dB
VSWR Primary			1.3	1.7	: 1
VSWR Secondary			1.3	1.7	: 1
Power Rating	Average	30			W
	Peak	500			W
Impedance		50			Ohms
Weight		2.12			ounces
Input / Output Connectors		2.92mm-Female			
Material		Aluminum			
Finish		Blue Paint			

Coaxial 30W 20dB Dual Directional Coupler 1 – 26.5GHz



*Environmental Specifications and Test Standards*

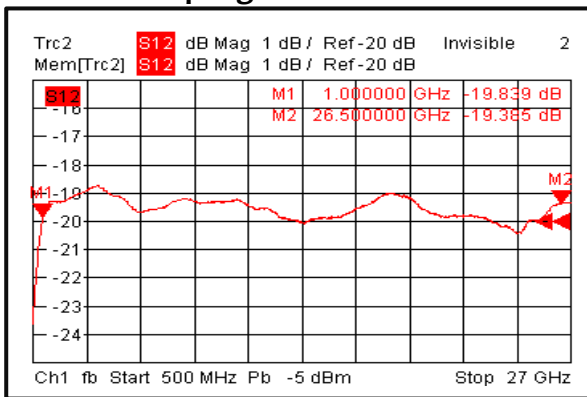
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)		MIL-STD-883

**Coaxial 30W 20dB Dual Directional Coupler 1 – 26.5GHz**

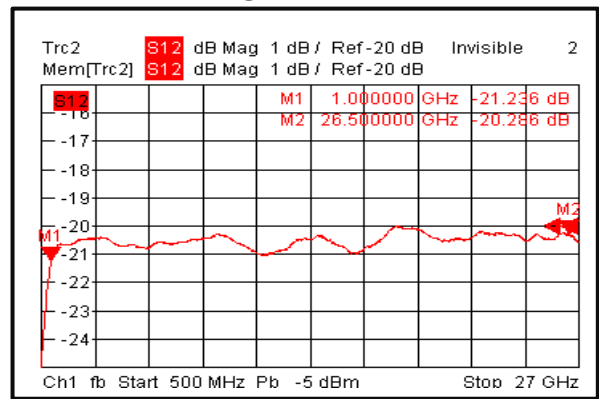


### Typical Performance Plots

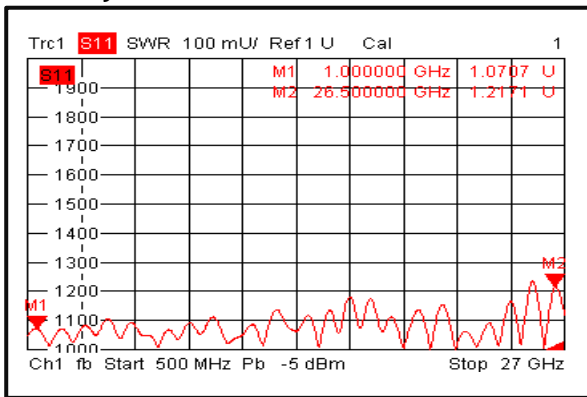
#### Nominal Coupling 1



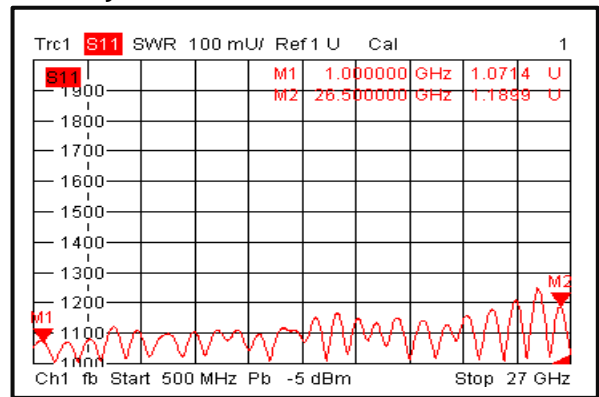
#### Nominal Coupling 2



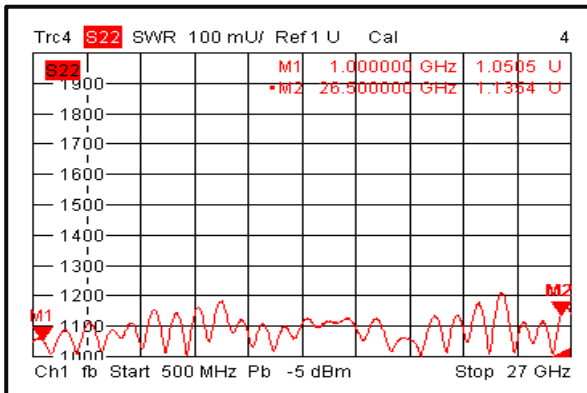
#### Primary VSWR 1



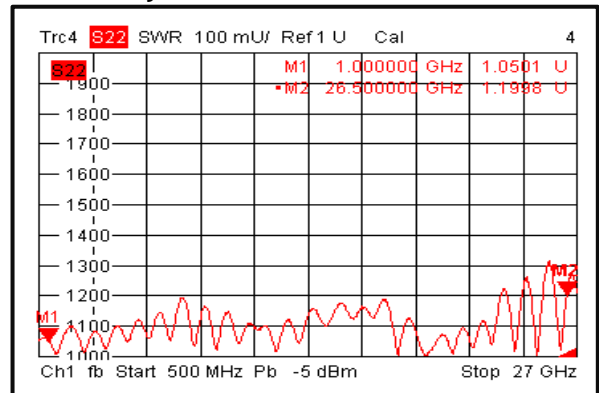
#### Primary VSWR 2



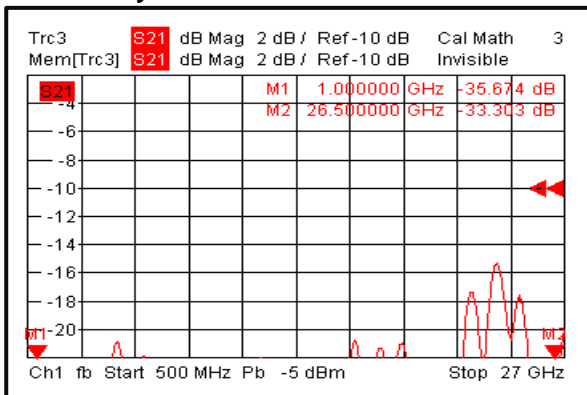
#### Secondary VSWR 1



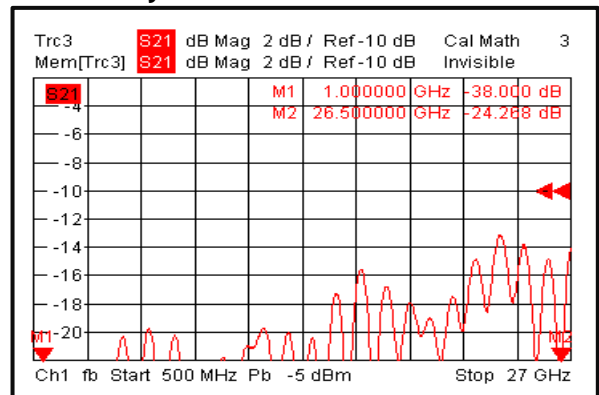
#### Secondary VSWR 2



#### Directivity 1



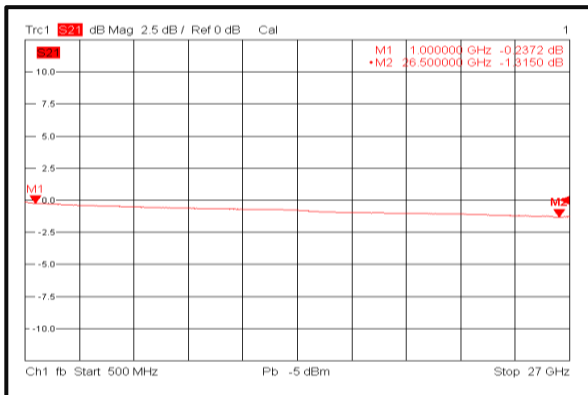
#### Directivity 2



Coaxial 30W 20dB Dual Directional Coupler 1 - 26.5GHz

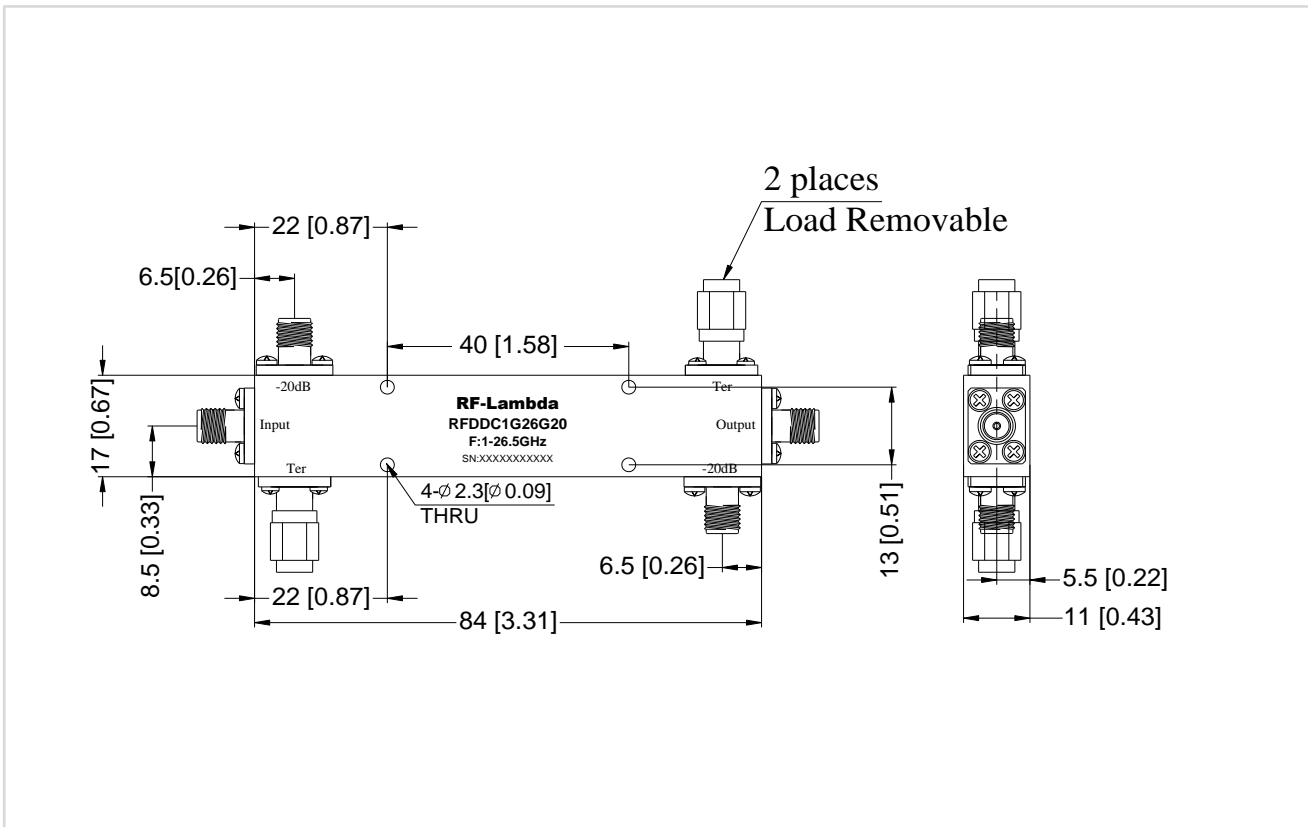


**Insertion Loss**



**Outline Drawing:**

All Dimensions in mm [inches]  
Tolerance  $\pm 0.25$ [0.01]



**Important Notice**

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**Coaxial 30W 20dB Dual Directional Coupler 1 - 26.5GHz**