



Coaxial 30W 15dB Dual Directional Coupler 8 – 26.5GHz



Features

- High power handling up to 30W
- Wide band operation 8-26.5GHz
- 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	8		26.5	GHz
Nominal Coupling	14	15	16	dB
Frequency Sensitivity		± 0.5	± 0.75	dB
Directivity	12	15		dB
Insertion Loss (Excl Coupling)			1.5	dB
Insertion Loss (true)		1.1	1.6	dB
VSWR Primary		1.3	1.5	: 1
VSWR Secondary		1.3	1.5	: 1
Power Rating	Average	30		W
	Peak	500		W
Impedance		50		Ohms
Weight		1.6Max.		ounces
Input / Output Connectors		2.92mm-Female		
Material		Aluminum		
Finish		Blue Paint		

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Environmental Specifications and Test Standards

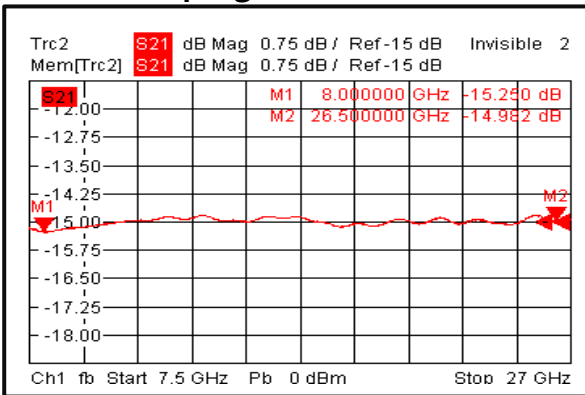
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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

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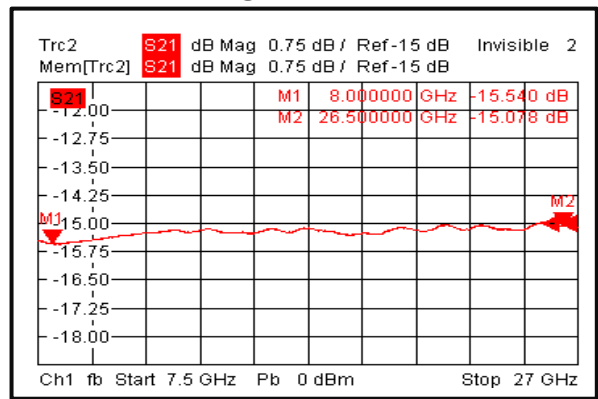


Typical Performance Plots

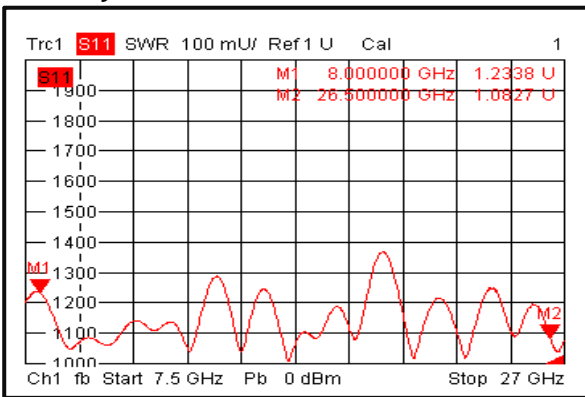
Nominal Coupling 1



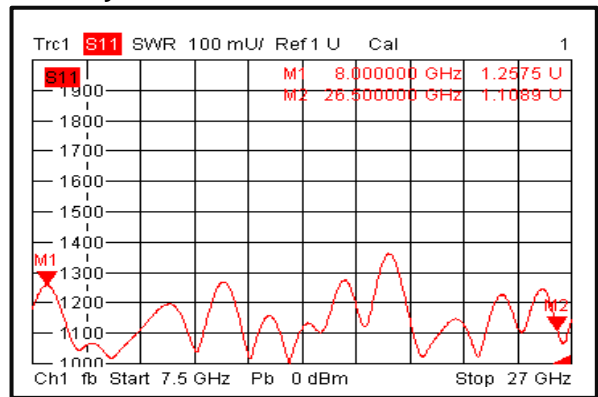
Nominal Coupling 2



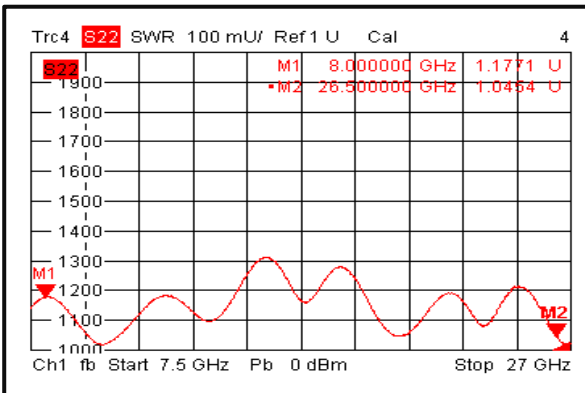
Primary VSWR 1



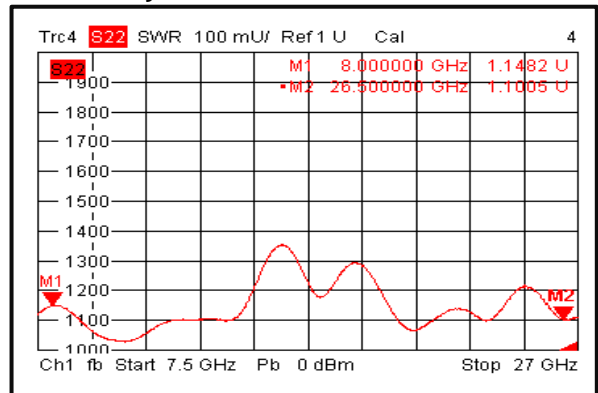
Primary VSWR 2



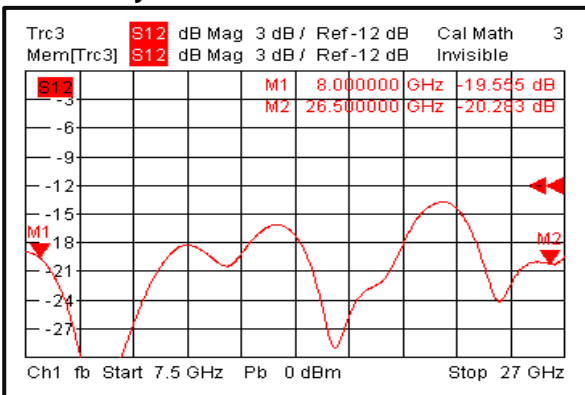
Secondary VSWR 1



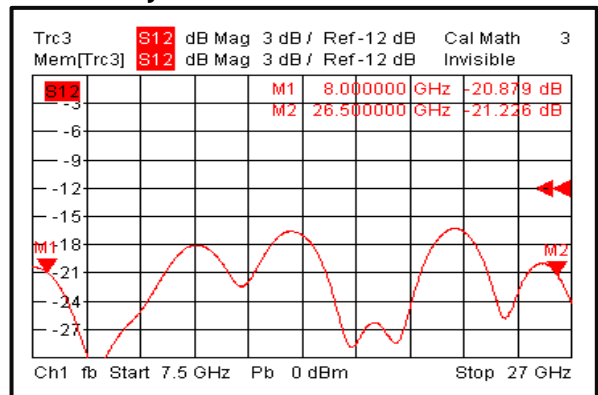
Secondary VSWR 2



Directivity 1



Directivity 2



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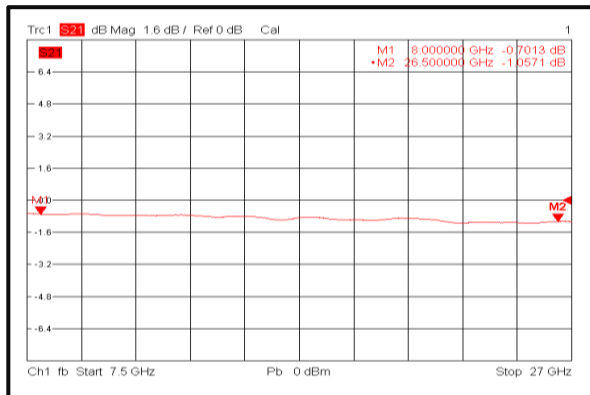


RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFDDC8G26G15

Insertion Loss

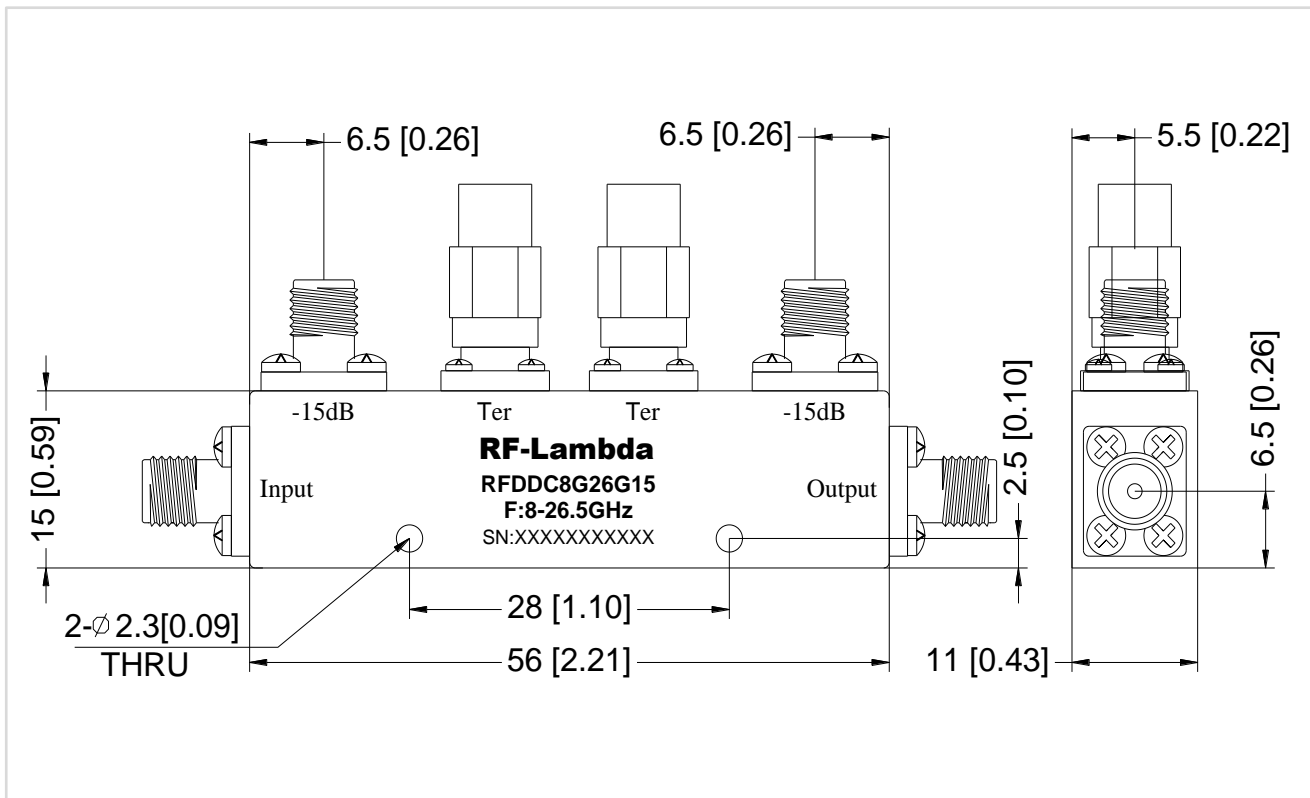


Outline Drawing:

All Dimensions in mm (inches)

Outline Tolerance ± 0.5 (0.02)

Mounting Holes Tolerance ± 0.2 (0.008)



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