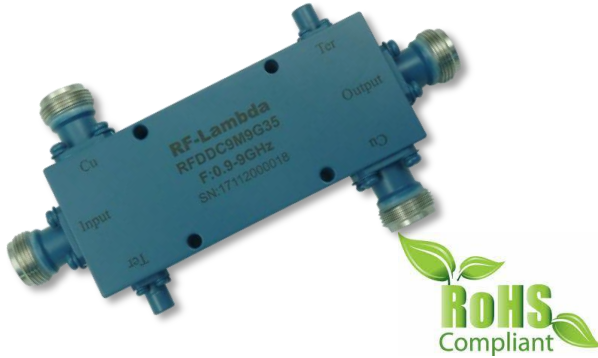




### Coaxial 250W 35dB Dual Directional Coupler 0.9 - 9GHz



#### Features

- High power handling up to 250 W
- Ultra Wide band operation
- High directivity 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, $T_A=25\text{ }^\circ\text{C}$

Parameter		Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		0.9		4	4		9	GHz
Nominal Coupling		34	35	36	34	35	36	dB
Frequency Sensitivity			$\pm 0.5$	$\pm 0.7$		$\pm 0.5$	$\pm 0.7$	dB
Directivity		15	17		11	13		dB
Insertion Loss(Excl Coupling)				0.3			0.5	dB
Insertion Loss (True)			0.2	0.3		0.35	0.5	dB
VSWR Primary			1.3	1.4		1.25	1.4	: 1
VSWR Secondary			1.15	1.35		1.2	1.35	: 1
Power Rating	Average	250						W
	Peak	3						KW
Impedance		50						Ohms
Weight		9.88						Ounces
Input / Output Connectors		N-Female						
Material		Aluminum						
Finish		Blue Paint						

Coaxial 250W 35dB Dual Directional Coupler 0.9 - 9GHz



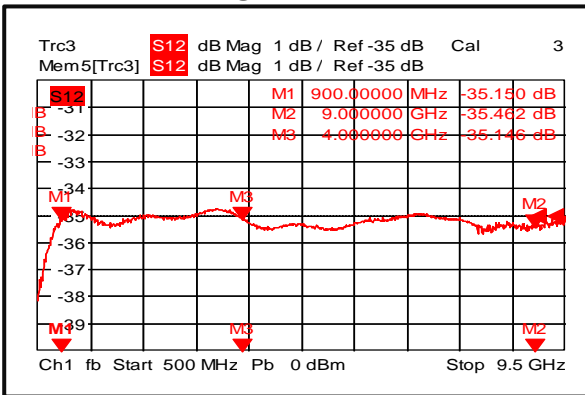
*Environmental Specifications and Test Standards*

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

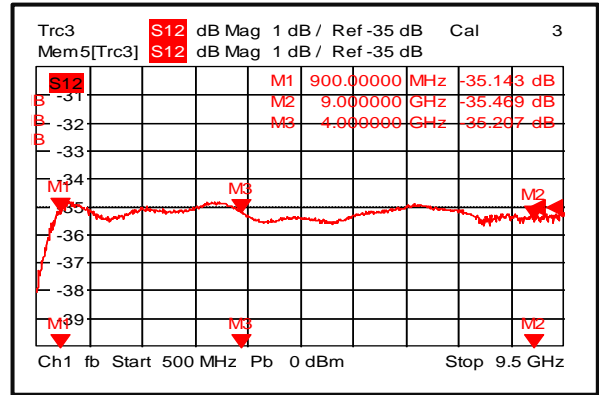


### Typical Performance Plots

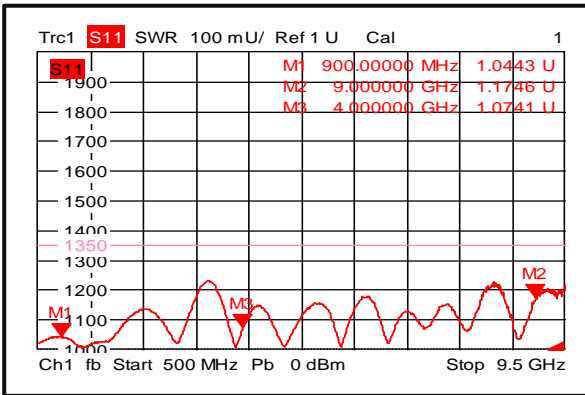
#### Nominal Coupling 1



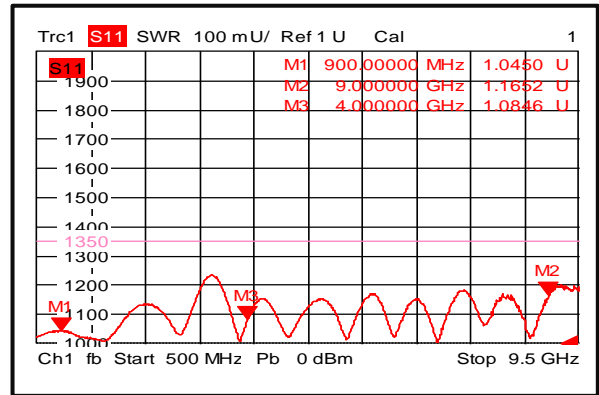
#### Nominal Coupling 2



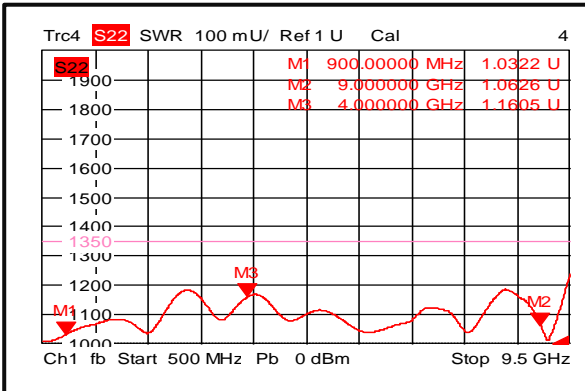
#### Primary VSWR1



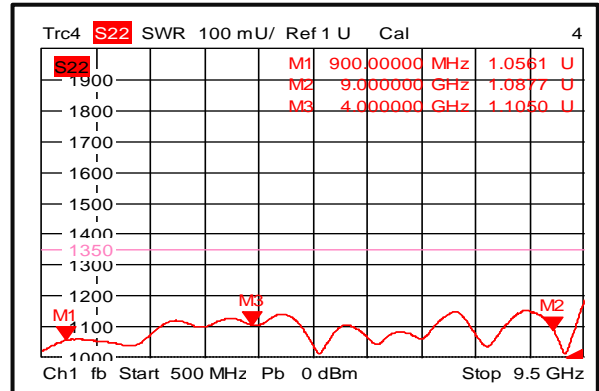
#### Primary VSWR 2



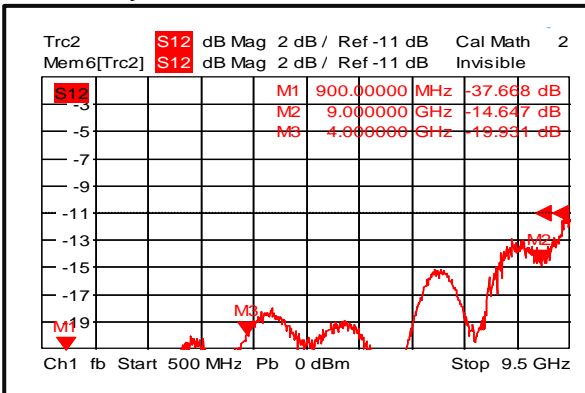
#### Secondary VSWR 1



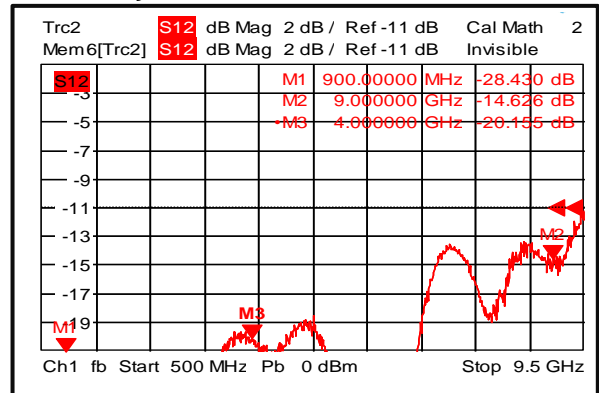
#### Secondary VSWR 2



#### Directivity 1

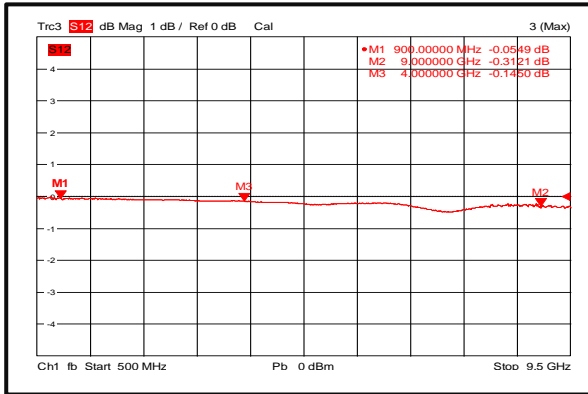


#### Directivity 2





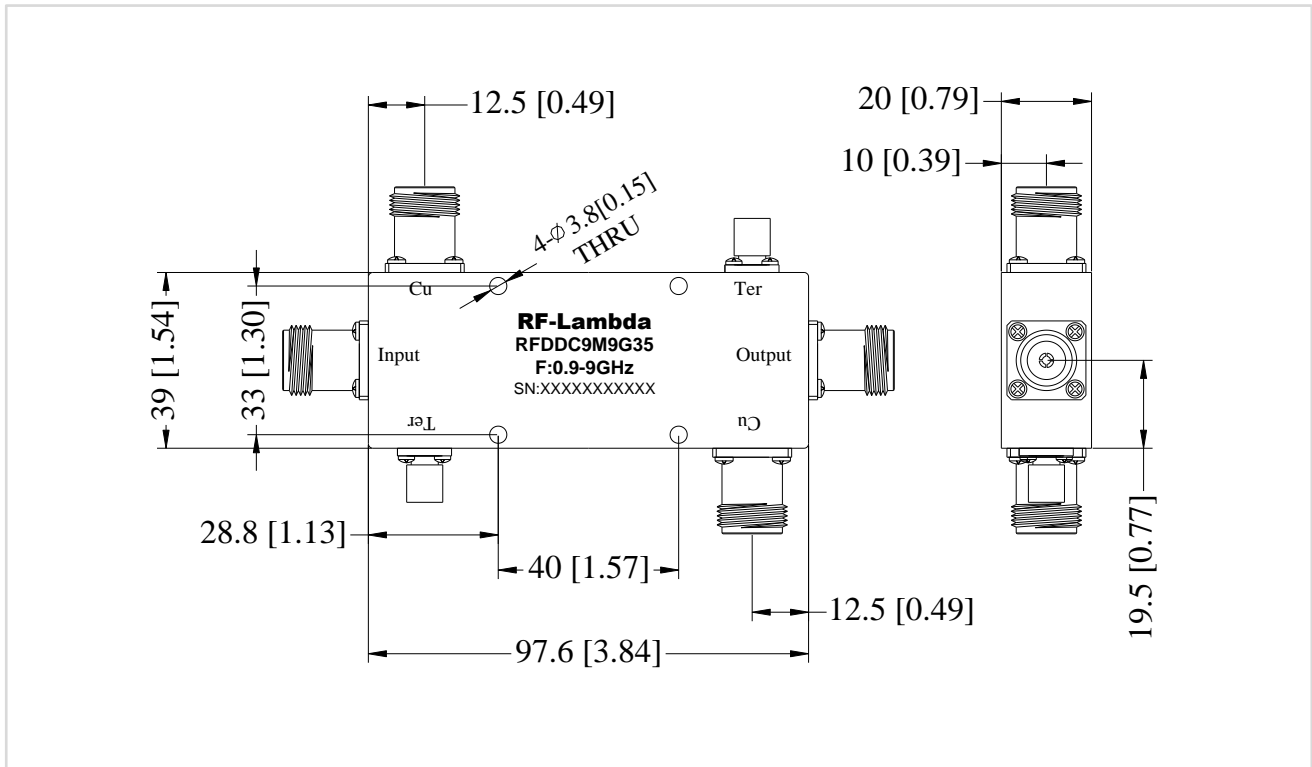
**Insertion Loss**



**Outline Drawing:**

All Dimensions in mm [inches]

Tolerance  $\pm 0.25$  [0.01]



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