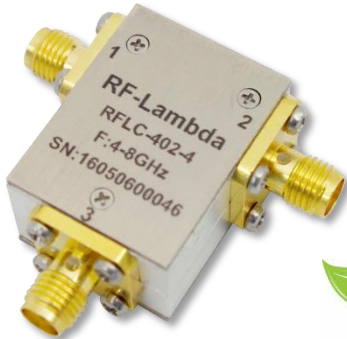




### Ultra Wide Band Coaxial Circulator 4-8GHz



#### Features

- High power handling up to 80W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- All specifications can be modified upon request

#### Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

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

Parameter	Min	Typ	Max	Units
Frequency Range	4-8			GHz
Insertion Loss	-20°C	+25°C	+70°C	°C
	0.60	0.50	0.60	dB
Isolation (Note 1)	-20°C	+25°C	+70°C	°C
	17	19	17	dB
VSWR	-20°C	+25°C	+70°C	°C
	1.40	1.30	1.40	:1
Forward Power (CW)			80	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input /Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum alloy			
Weight	1.41			ounces
Impedance	50			$\Omega$
Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB) Bandwidth (20~30) % x Center Frequency (Isolation >21dB) Bandwidth (40~60) % x Center Frequency (Isolation >20dB) Ask manufacturer for details				

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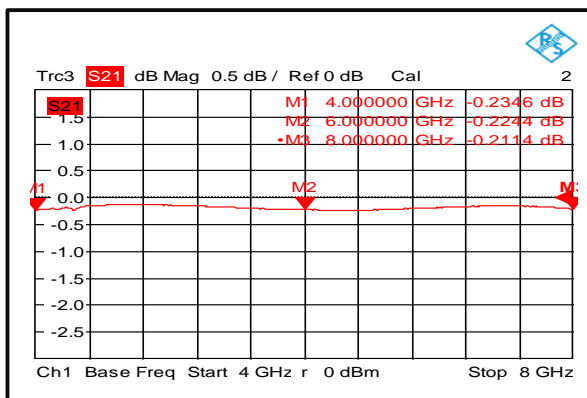


**Environmental Specifications and Test Standards**

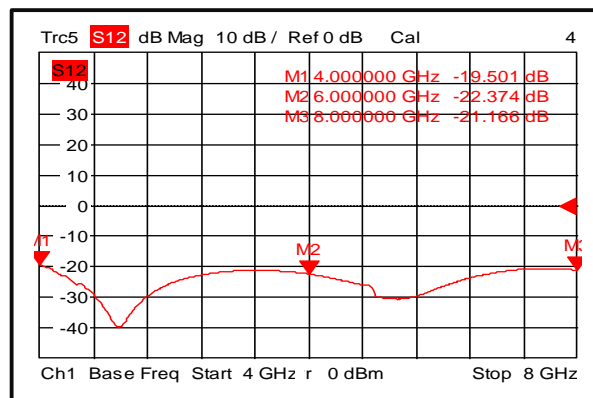
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+70°C
Storage Temperature		-40°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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	MIL-STD-883 (For Hermetically Sealed Units)

**Typical Performance Plots**

**Insertion Loss**



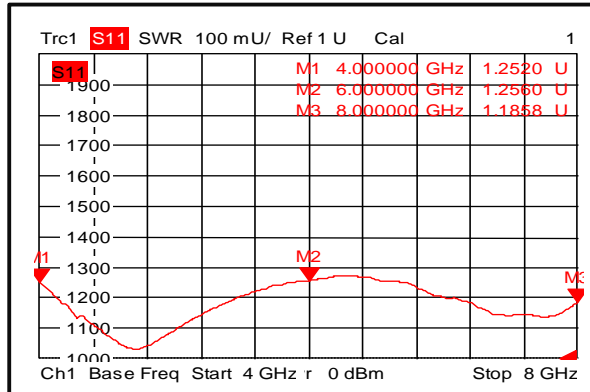
**Isolation**



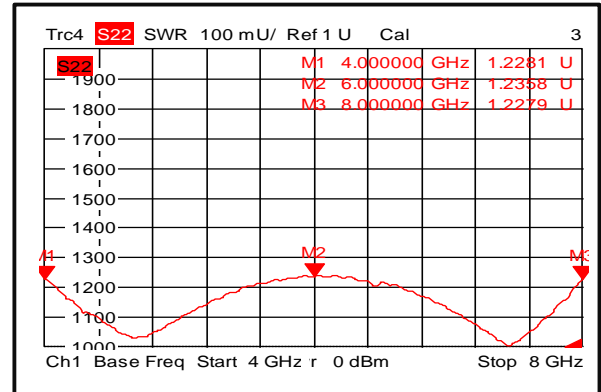
**Ultra Wide Band Coaxial Circulator 4-8GHz**



**VSWR1**

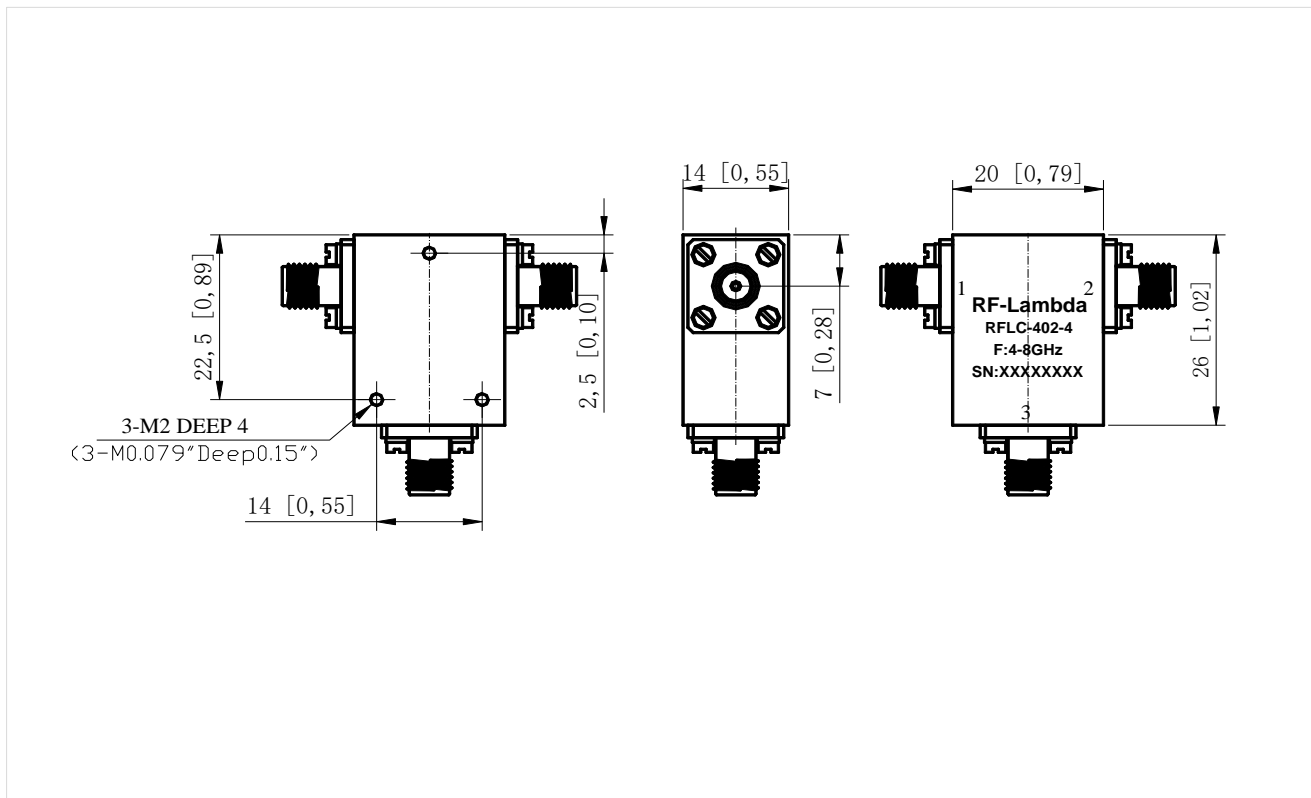


**VSWR2**



**Outline Drawing:**

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



**Important Notice**

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