



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFLI-601-2

Wide Band Coaxial Isolator 8.2 – 8.7GHz



Features

- High power handling capability up to 10W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature

Typical Applications

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

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

Parameter	Min	Typ	Max	Units
Frequency Range	8.2-8.7			GHz
Insertion Loss		0.30	0.40	dB
Isolation (Note 1)	23	25		dB
VSWR		1.15	1.20	:1
Forward Power (CW)			10	W
Reverse Power (CW)			1	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum alloy			
Weight	0.71			ounces
Impedance	50			Ω

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss
Bandwidth (5 ~10) % x Center Frequency (Isolation >26dB)
Bandwidth (20~30) % x Center Frequency (Isolation >25dB)
Bandwidth (40~60) % x Center Frequency (Isolation >23dB)
Ask manufacturer for details

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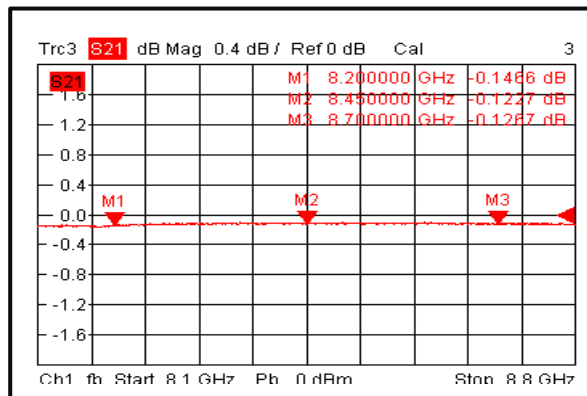
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Environmental Specifications and Test Standards

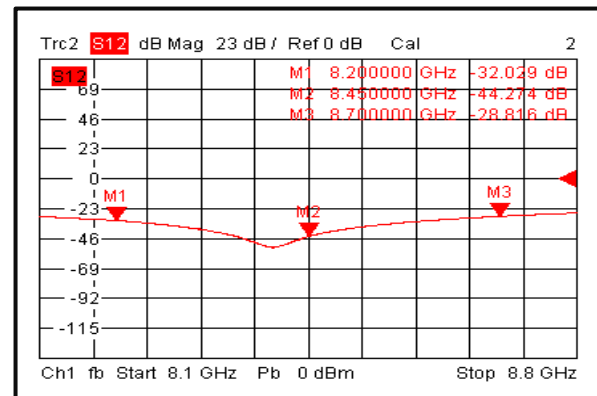
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+80°C
Storage Temperature		-45°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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	MIL-STD-883	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)		MIL-STD-883 (For Hermetically Sealed Units)

Typical Performance Plots

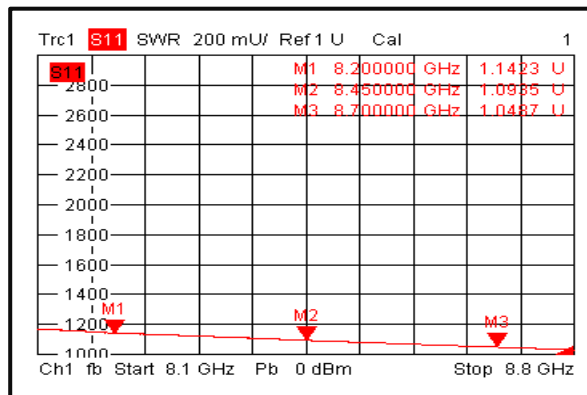
Insertion Loss



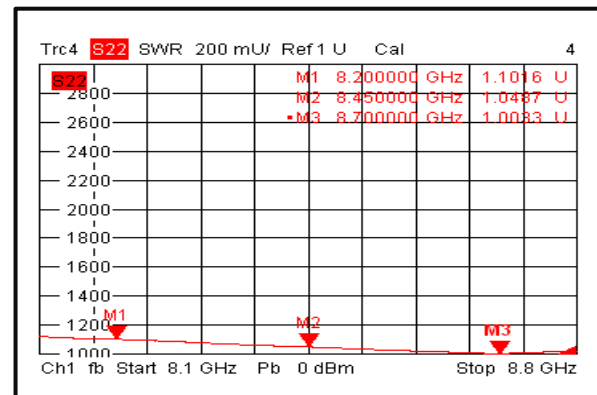
Isolation



VSWR 1



VSWR2



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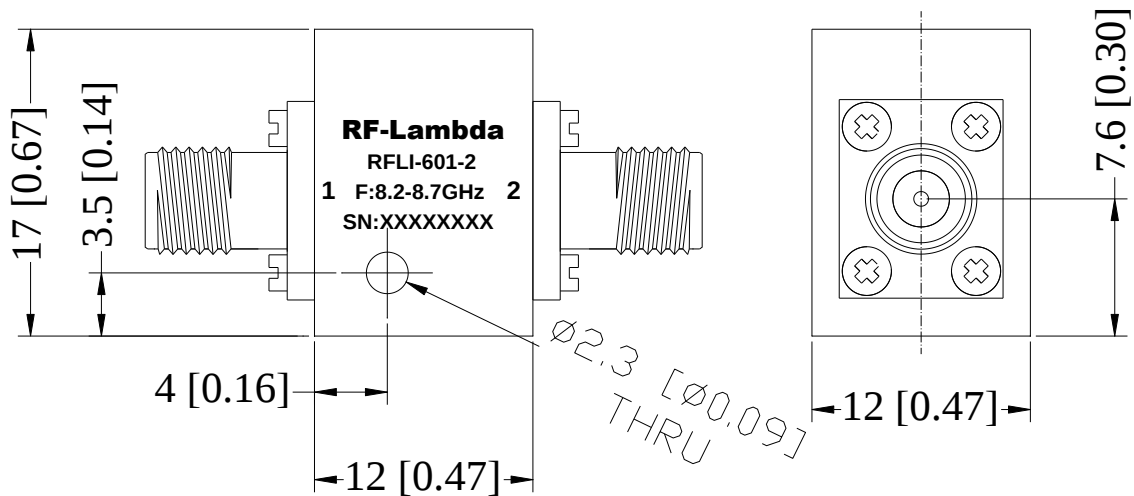
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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