

Ultra Wide Band Coaxial Isolator 0.9GHz-1.5GHz



Product Description

RFLI202M90G15 is an ultra wide band coaxial Isolator with a frequency range of 0.9 to 1.5GHz.

The Isolator has a typical isolation of 18dB. The maximum insertion loss is 1.0dB.

The operating temperature of this product is within -10 to +50°C

Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

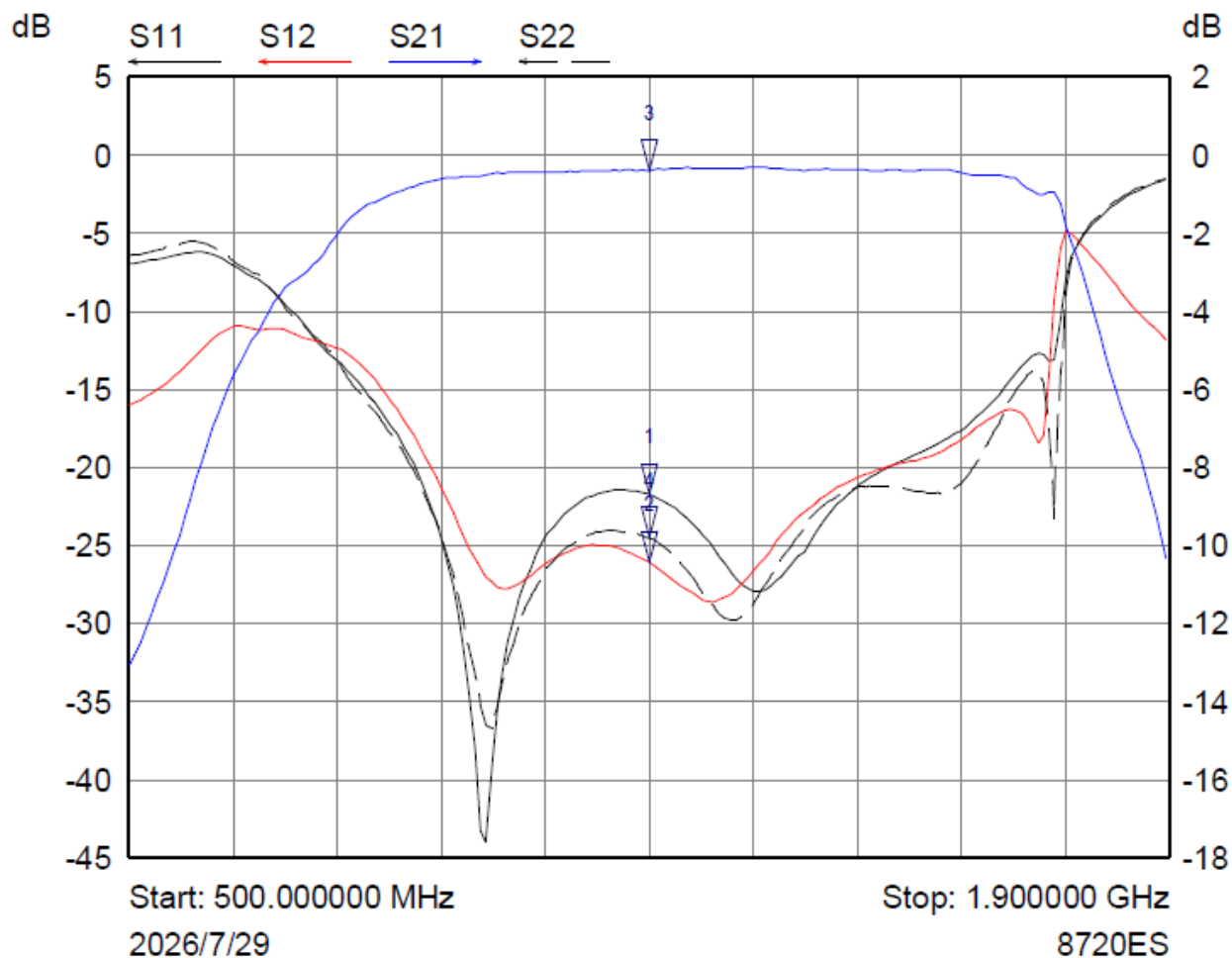
Electrical Specifications(T_A=25°C)

Parameter		Min	Typ	Max	Units
Frequency Range		0.9		1.5	GHz
Insertion Loss				1.0	dB
Isolation		18			dB
VSWR				1.3	:1
Forward Power (CW)				50	W
Reverse Power (CW)				10	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)			
Input / Output Connectors		RFLI202M90G15S (SMA-Female) RFLI202M90G15N (N-Female)			
Weight	SMA-Female	/ Max.			lbs.
	N-Female	0.9 Max.			
Impedance			50		Ω

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-10°C to +50°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
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 (For Hermetically Sealed Units)

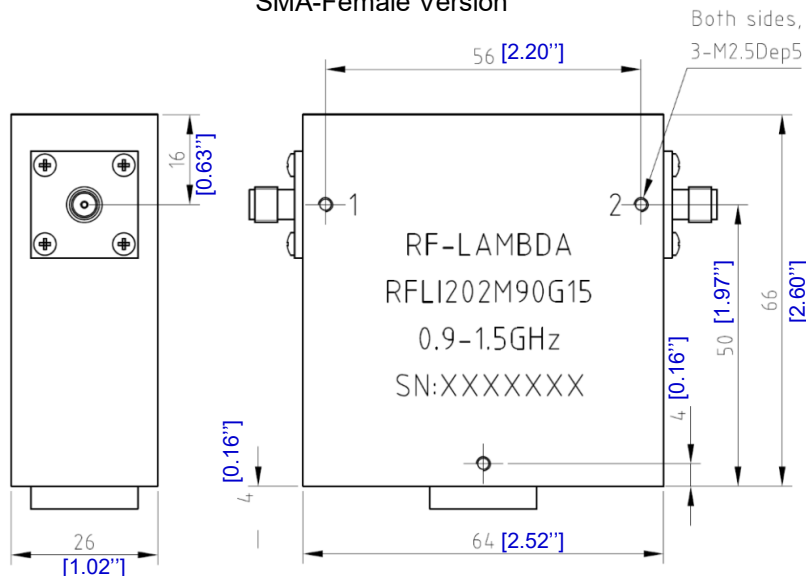
Typical Performance Plots



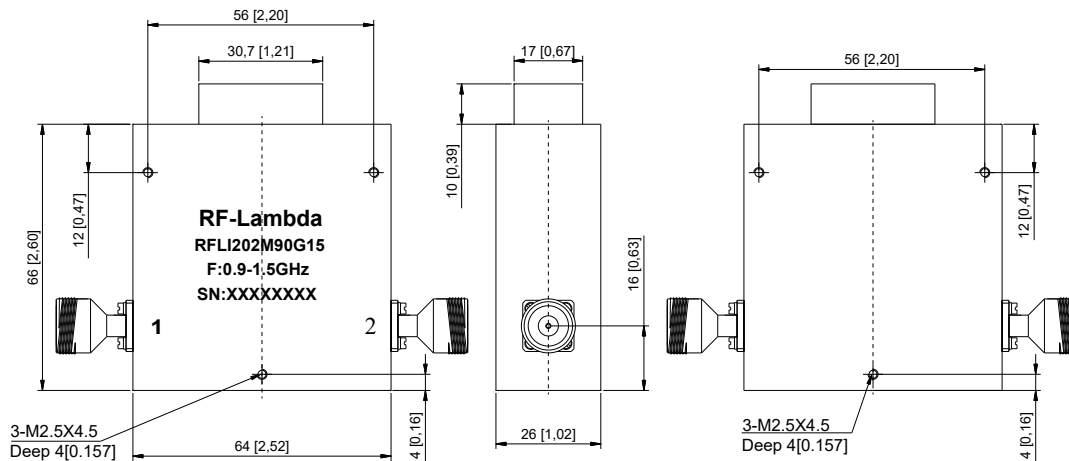
Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	1.200000 GHz	-21.7300 dB	
2 ▽	S12	1.200000 GHz	-26.1116 dB	
3 ▽	S21	1.200000 GHz	-0.3823 dB	
4 ▽	S22	1.200000 GHz	-24.5185 dB	

Outline Drawing

SMA-Female Version



N-Female Version



Notes:

1. Package Material: Aluminum Alloy / Copper
2. Finish: Nickel Plated
3. All dimensions are in millimeters [inches].
4. Standard torque wrench must be used to secure RF connectors.

Additional Information

Documentation

Webpage

ESD Policy

https://rflambda.com/pdf/rflambda_esd_control.pdf

Connector Torque Specifications

https://www.rflambda.com/pdf/Torque_Specifications.pdf

Random Vibration Test Standard

https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFLI202M90G15S	Connectors SMA-Female	0.9GHz-1.5GHz Coaxial Isolator
RFLI202M90G15N	Connectors N-Female	0.9GHz-1.5GHz Coaxial Isolator

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