

Ultra Wide Band Coaxial Isolator 0.95GHz-1.3GHz



Note: Photo is for illustration purposes only.
Please refer to outline drawing.

Product Description

RFLI202M95G13SMF is a wide band coaxial Isolator with a frequency range of 0.95 to 1.3GHz.

The Isolator has a typical isolation of 19dB. The maximum insertion loss is 0.4dB.

The operating temperature of this product is within -40 to +70°C

Features

- High power handling up to 200W
- 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

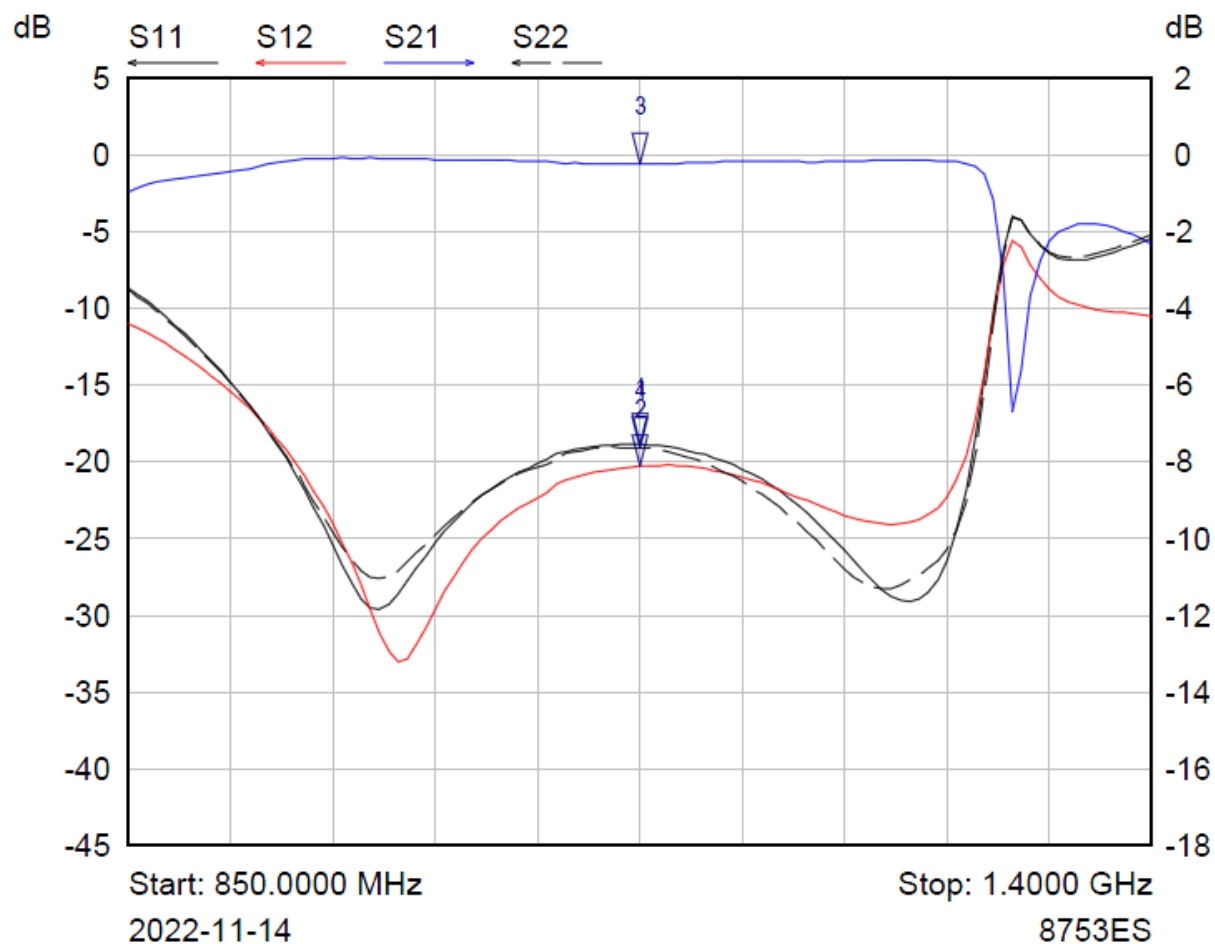
Electrical Specifications(T_A=25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		0.95 – 1.3		GHz
Insertion Loss		0.30	0.40	dB
Isolation	19	20		dB
VSWR		1.20	1.29	:1
Forward Power (CW)			200	W
Reverse Power (CW)			20	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		SMA–Male / SMA-Female		
Weight		0.38		lbs.
Impedance		50		Ω

Environmental Specifications and Test Standards

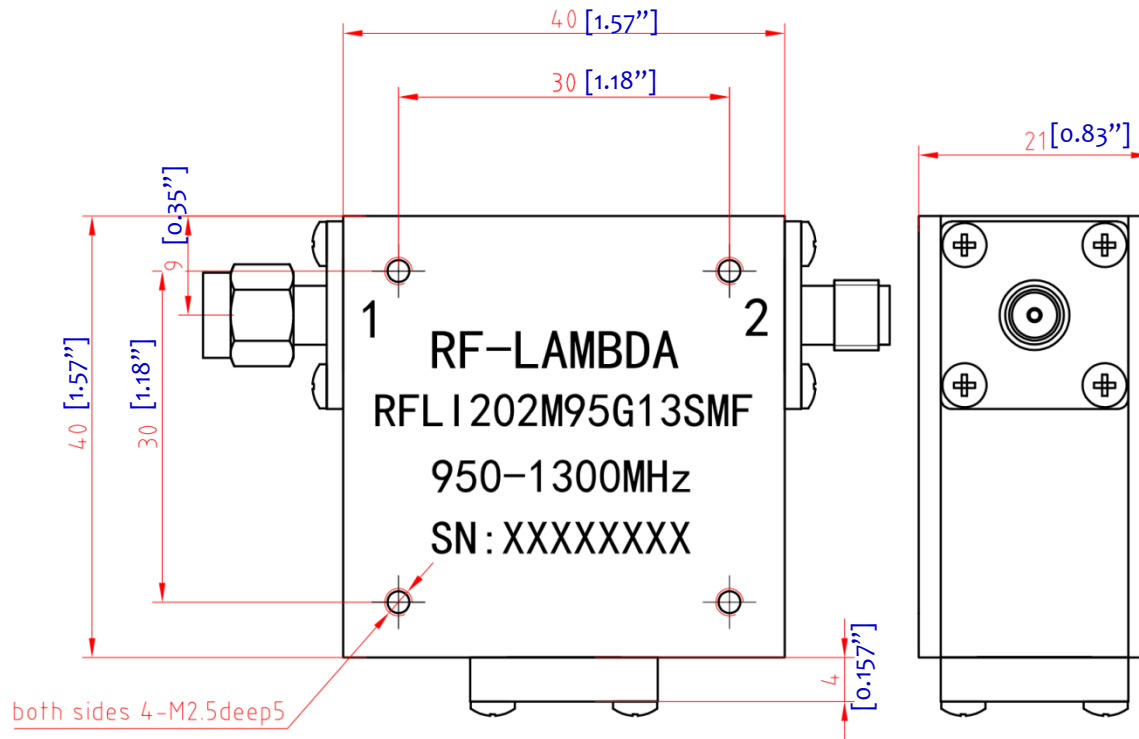
Parameter	Description
Operational Temperature	-40°C to +70°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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	1.1250 GHz	-18.86 dB	
2 ▾	S12	1.1250 GHz	-20.28 dB	
3 ▾	S21	1.1250 GHz	-0.24 dB	
4 ▾	S22	1.1250 GHz	-19.07 dB	

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy
2. Finish: Nickel Plated
3. All dimensions are in millimeters [inches]
4. Outline Tolerances ± 0.5 [0.02], Mounting Hole Tolerances ± 0.2 [0.008] unless otherwise specified.
5. 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
RFLI202M95G13SMF	SMA–Male or SMA–Female Connectors	0.95GHz-1.3GHz Coaxial Isolator

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