

Ultra Wide Band Coaxial Isolator 100MHz-200MHz



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

Product Description

RFLI101M10M20 is an ultra wide band coaxial Isolator with a frequency range of 100 to 200MHz.

The Isolator has a typical isolation of 13dB. The maximum insertion loss is 1.5dB.

The operating temperature of this product is within -20 to +70°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($T_A=25^\circ\text{C}$)

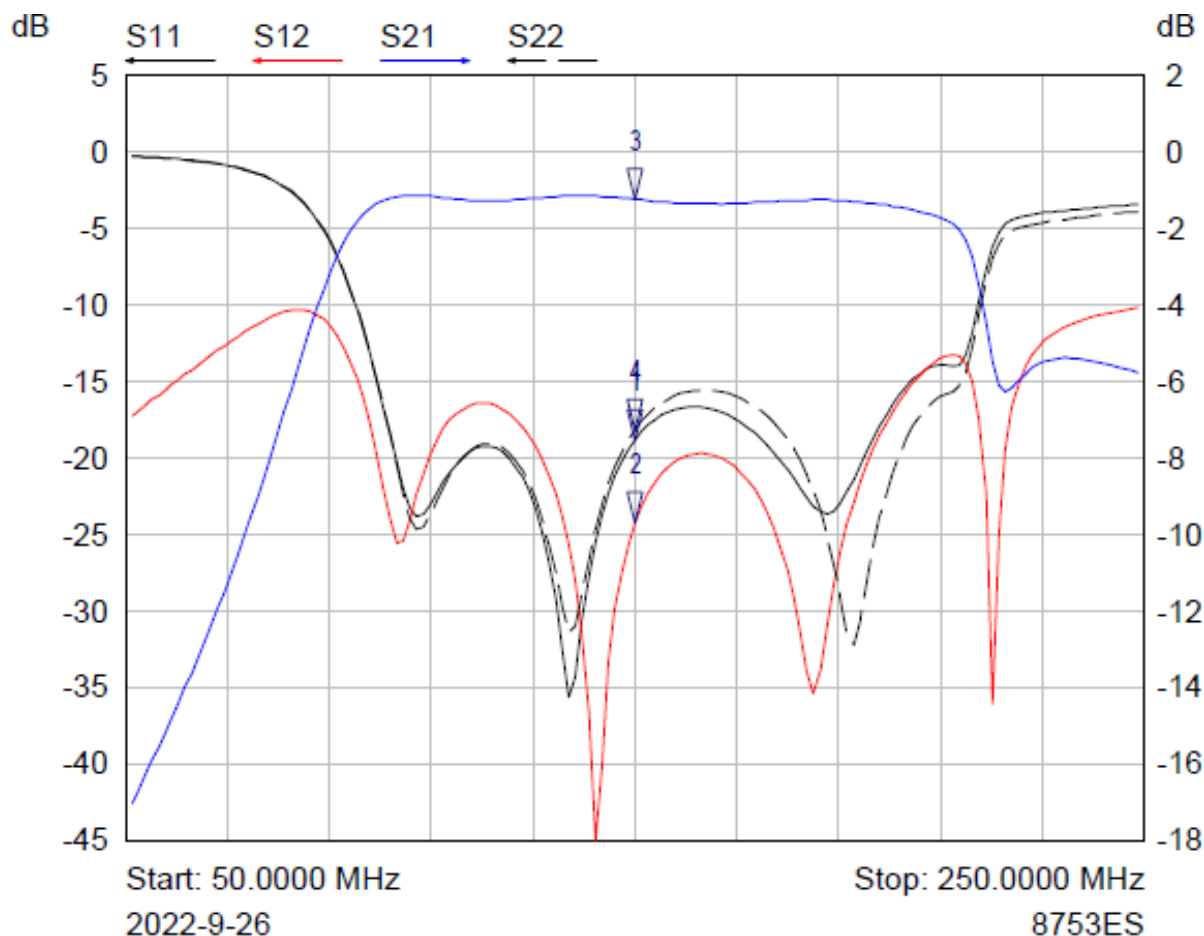
Parameter	Min	Typ	Max	Units
Frequency Range		100 – 200		MHz
Insertion Loss			1.5	dB
Isolation	13			dB
VSWR			1.43	:1
Forward Power			50	W
Reverse Power			5	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		RFLI101M10M20N---N-Female RFLI101M10M20S---SMA-Female		
Weight		-		lbs.
Impedance		50		Ω

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°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

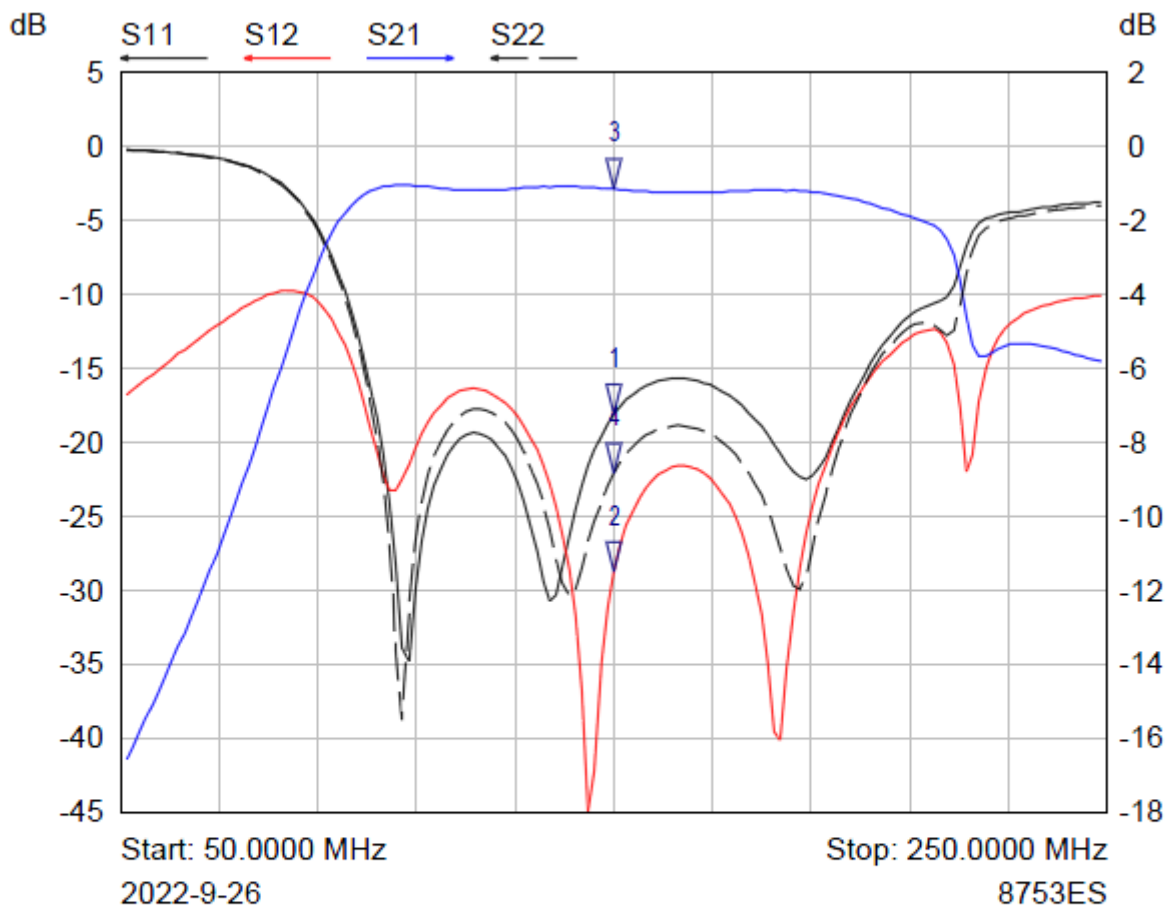
N-Female



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	150.0000 MHz	-18.79 dB	
2 ▽	S12	150.0000 MHz	-24.26 dB	
3 ▽	S21	150.0000 MHz	-1.23 dB	
4 ▽	S22	150.0000 MHz	-18.15 dB	

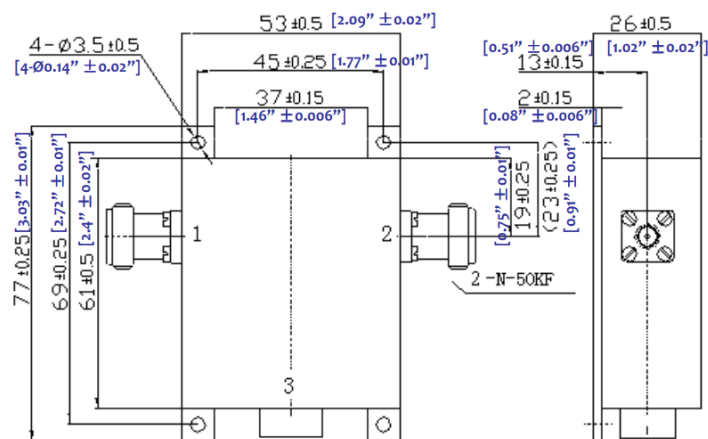
Typical Performance Plots

SMA-Female

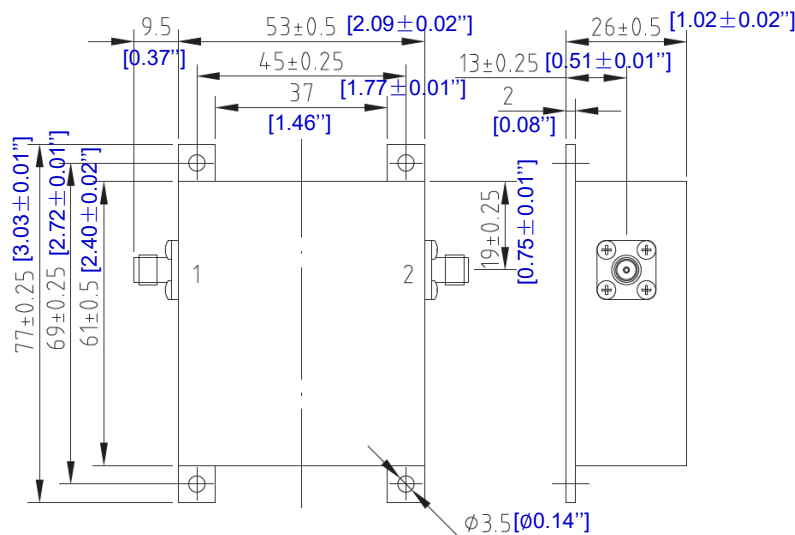


Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	150.0000 MHz	-18.11 dB	
2 ▾	S12	150.0000 MHz	-28.74 dB	
3 ▾	S21	150.0000 MHz	-1.15 dB	
4 ▾	S22	150.0000 MHz	-22.08 dB	

Outline Drawing



N-Female Version



SMA-Female Version

Notes:

1. Package Material : Aluminum / 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

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

Webpage

Ordering Information

Part Number	Modification	Description
RFLI101M10M20	N-Female or SMA-Female	100MHz-200MHz Coaxial Isolator

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