Ultra Wide Band Coaxial Isolator
190MHz – 230MHz

Note: The photo is for illustration purposes only.
Please refer to the outline drawing

Product Description

RFLI090M19M23 is an ultra wide band coaxial isolator with a frequency range of 190 to 230MHz.

The Isolator has a minimum isolation of 19dB. The maximum insertion loss is 0.6dB.

The operating temperature of this product is from -20 to +60ºC

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℃)

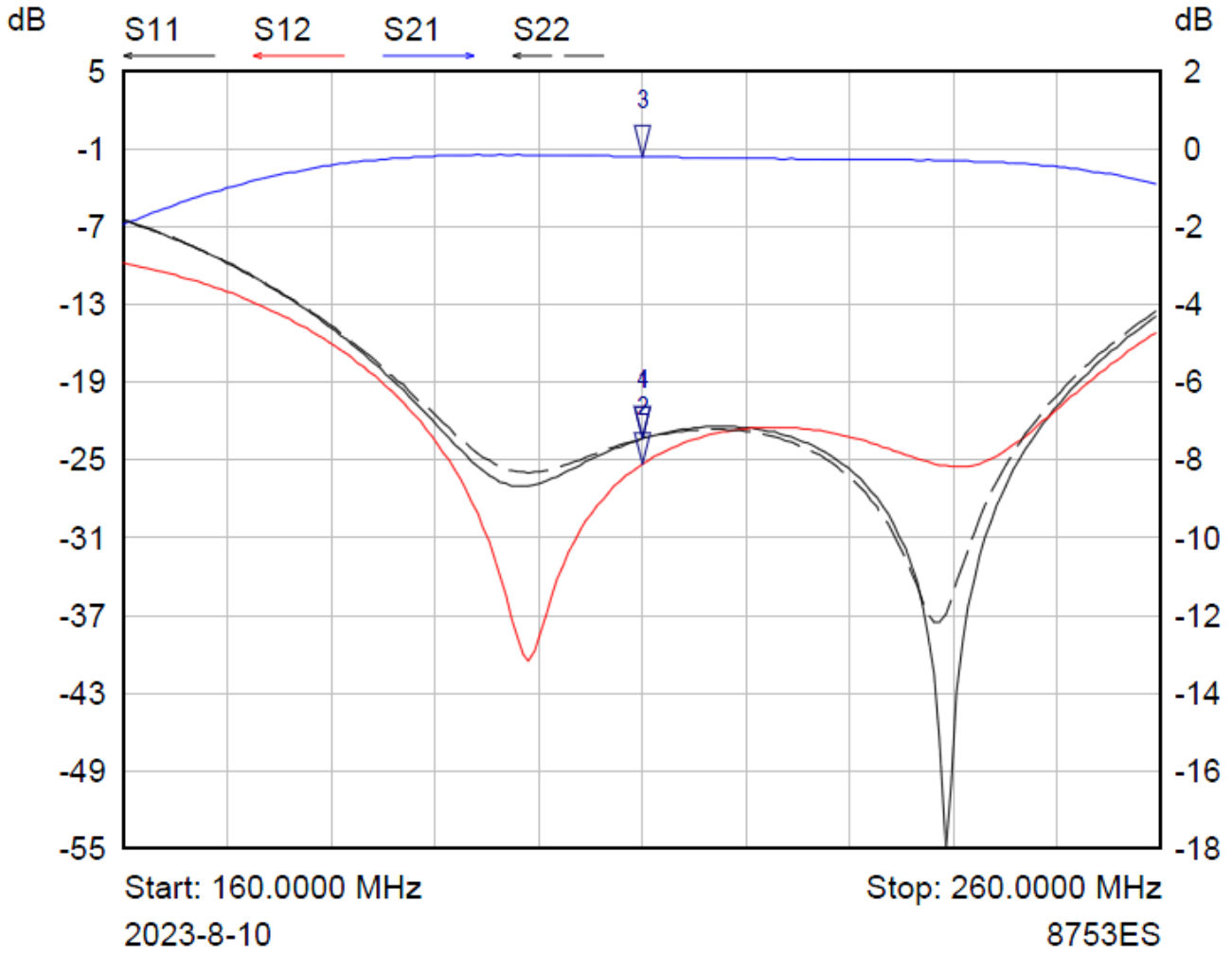
Parameter	Min	Typ	Max	Units
Frequency Range		190 – 230		MHz
Insertion Loss			0.6	dB
Isolation	19			dB
VSWR			1.25	:1
Forward Power (CW)			50	W
Reverse Power (CW)			5	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Connectors		SMA-Female / N-Female		
Impedance		50		Ω

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com

Environmental Specifications and Test Standards

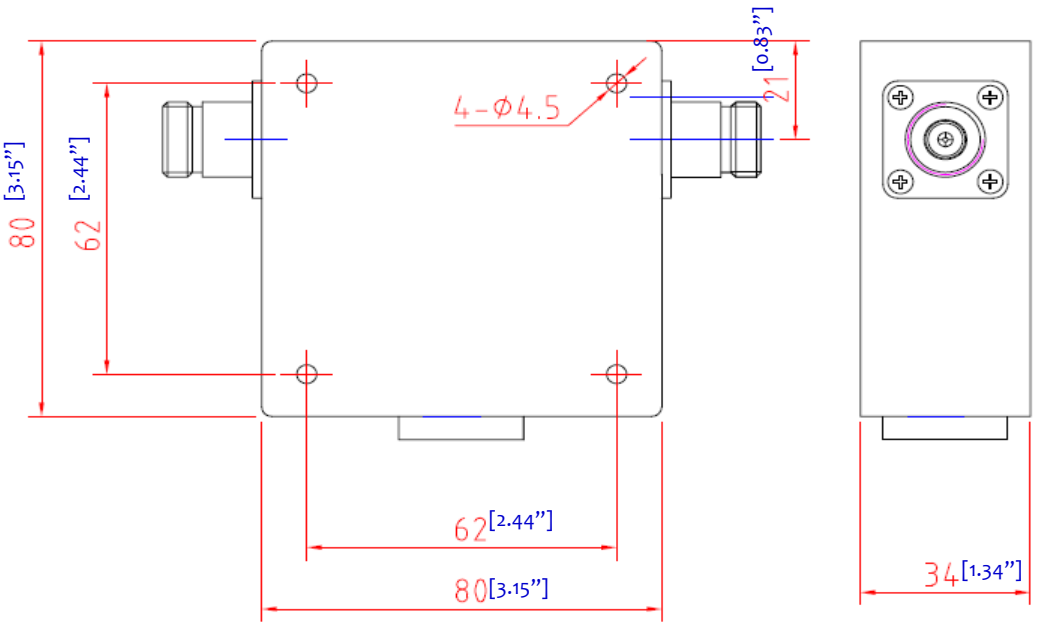
Parameter	Description
Operational Temperature	-20ºC to +70ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-20ºC → +70ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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	210.0000 MHz	-23.34 dB	
2 ▽	S12	210.0000 MHz	-25.30 dB	
3 ▽	S21	210.0000 MHz	-0.20 dB	
4 ▽	S22	210.0000 MHz	-23.35 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy
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
RFLI090M19M23	Connectors SMA-Female / N-Female	190MHz-230MHz Coaxial Isolator

Important Notice

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