

Ultra Wide Band Coaxial Isolator 600 – 850MHz



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

Product Description

RFLI101M60M85 is an ultra wide band coaxial isolator with a frequency range of 600 to 850MHz.

The isolator has a typical isolation of 17dB. The maximum insertion loss is 1.0dB.

The operating temperature of this product is within -40 to +85°C

Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- High peak to average handling capability
- All specifications can be modified upon request

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)

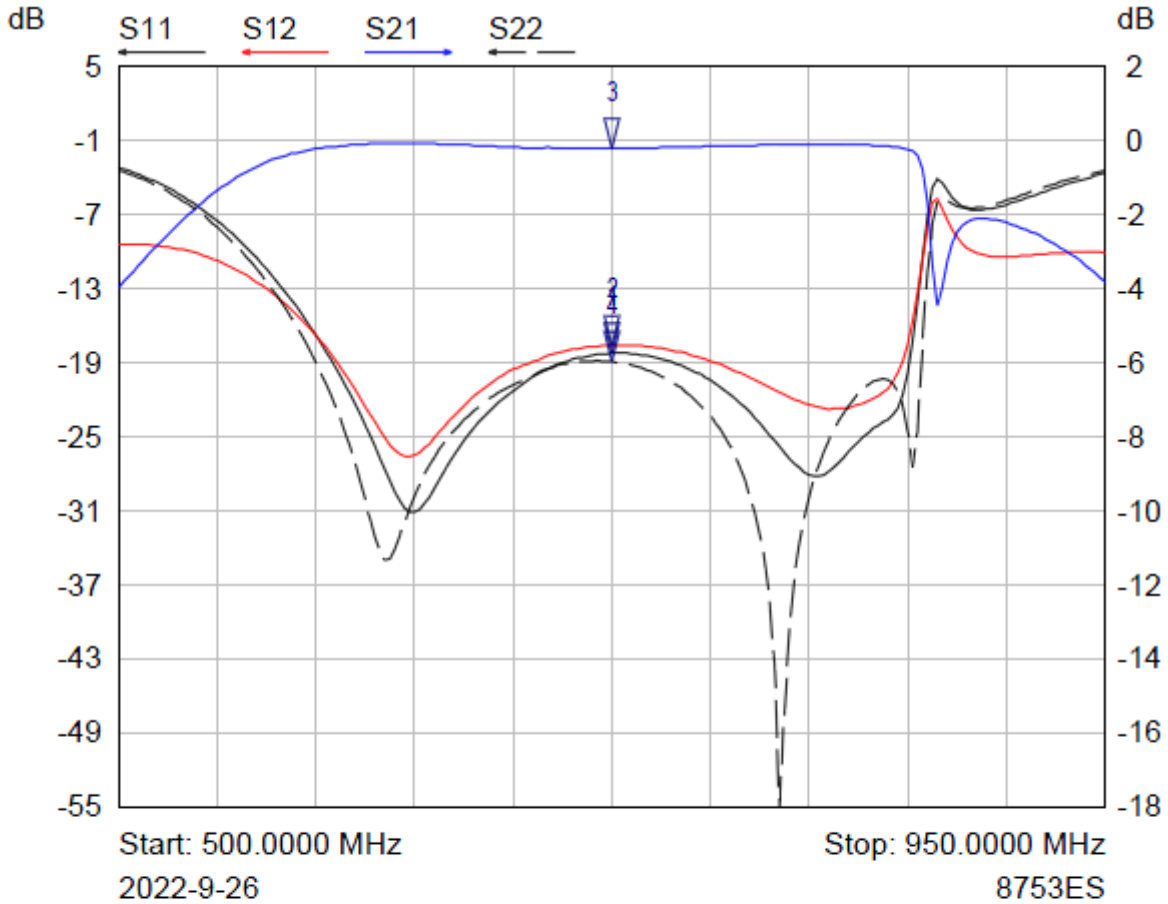
Parameter	Min	Typ	Max	Units
Frequency Range		600 - 850		MHz
Insertion Loss			1	dB
Isolation	17			dB
VSWR			1.33	:1
Forward Power (CW)			50	W
Reverse Power (CW)			5	W
Weight		0.73		lbs.
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Connectors		SMA-Female		
Impedance		50		Ω

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°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)

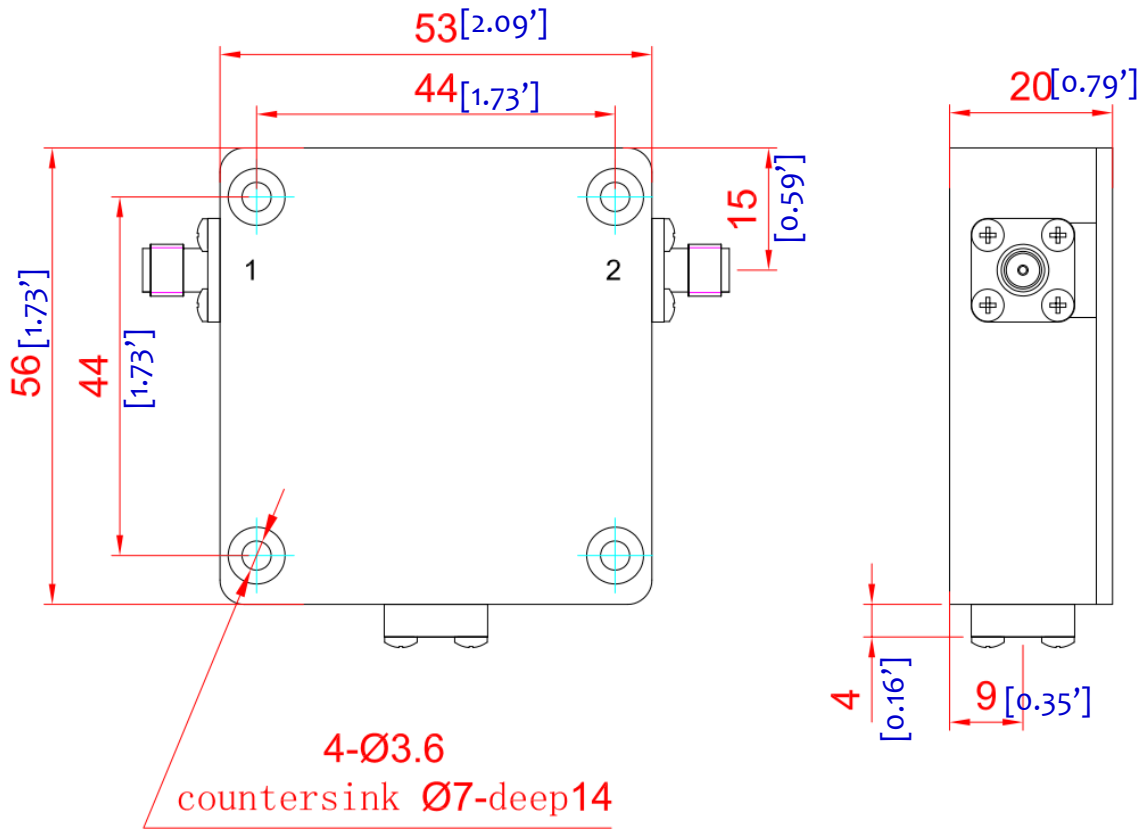
**For vibration testing details please see additional information section.

Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	725.0000 MHz	-18.24 dB	
2 ▾	S12	725.0000 MHz	-17.58 dB	
3 ▾	S21	725.0000 MHz	-0.21 dB	
4 ▾	S22	725.0000 MHz	-18.91 dB	

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy or Copper
2. Finish : Nickel Plated
3. All dimensions are in millimeters [inches]
4. Tolerance $\pm 0.25(0.01)$, unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors

Additional Information

Documentation	Webpage
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
RFLI101M60M85	Standard	600MHz-850MHz Coaxial Isolator

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