

Wide Band Coaxial Isolator (With 2nd Harmonic Rejection) 335-400MHz



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

Product Description

RFLI101M33M40L is a wide band coaxial Isolator with a frequency range of 335 to 400MHz.

The isolator has a minimum isolation of 19dB. The maximum insertion loss is 0.7dB.

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

Features

- High power handling up to 20W
- 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

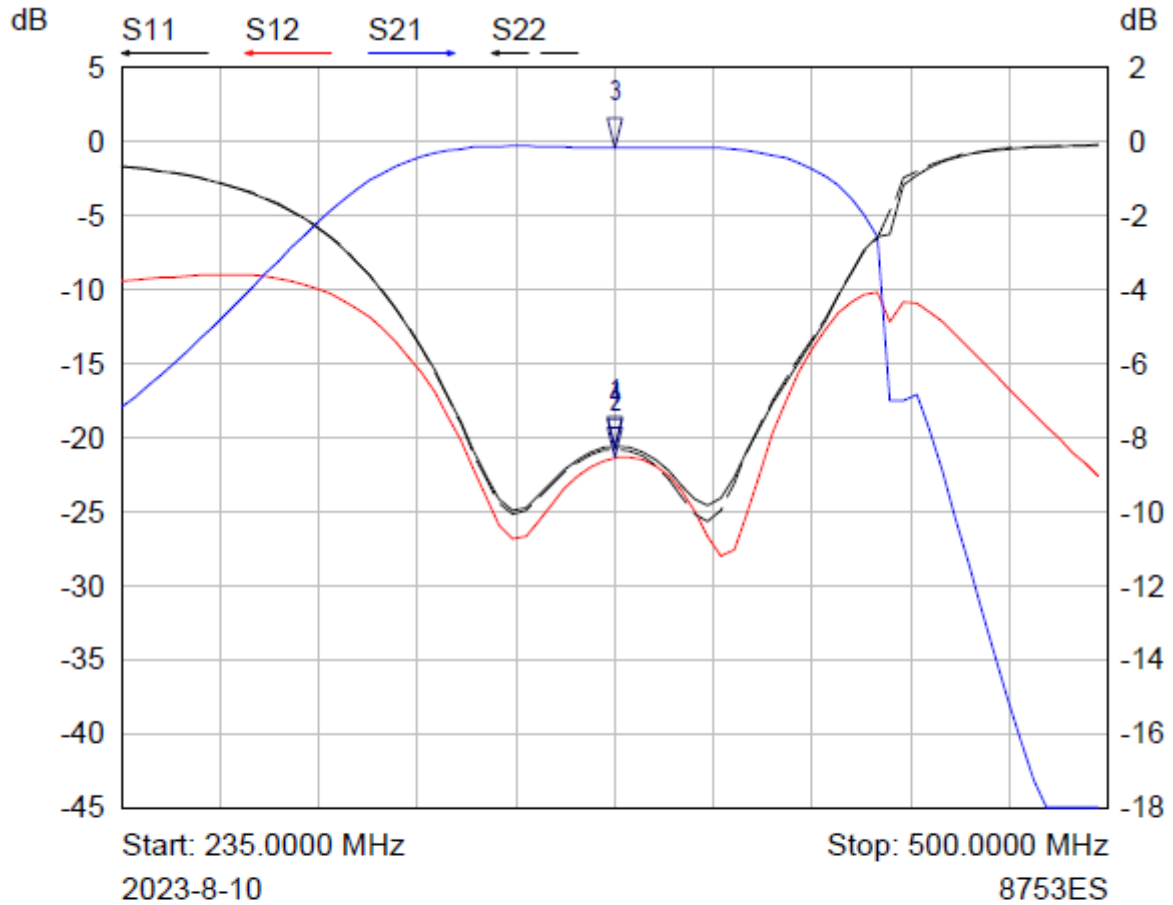
Electrical Specifications(T_A=25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		335 – 400		MHz
Insertion Loss		0.3	0.7	dB
Isolation	19	22		dB
2 nd Harmonic Rejection	25			dB
VSWR		1.15	1.3	:1
Forward Power (CW)			20	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		SMA-Female		
Impedance		50		Ω

Environmental Specifications and Test Standards

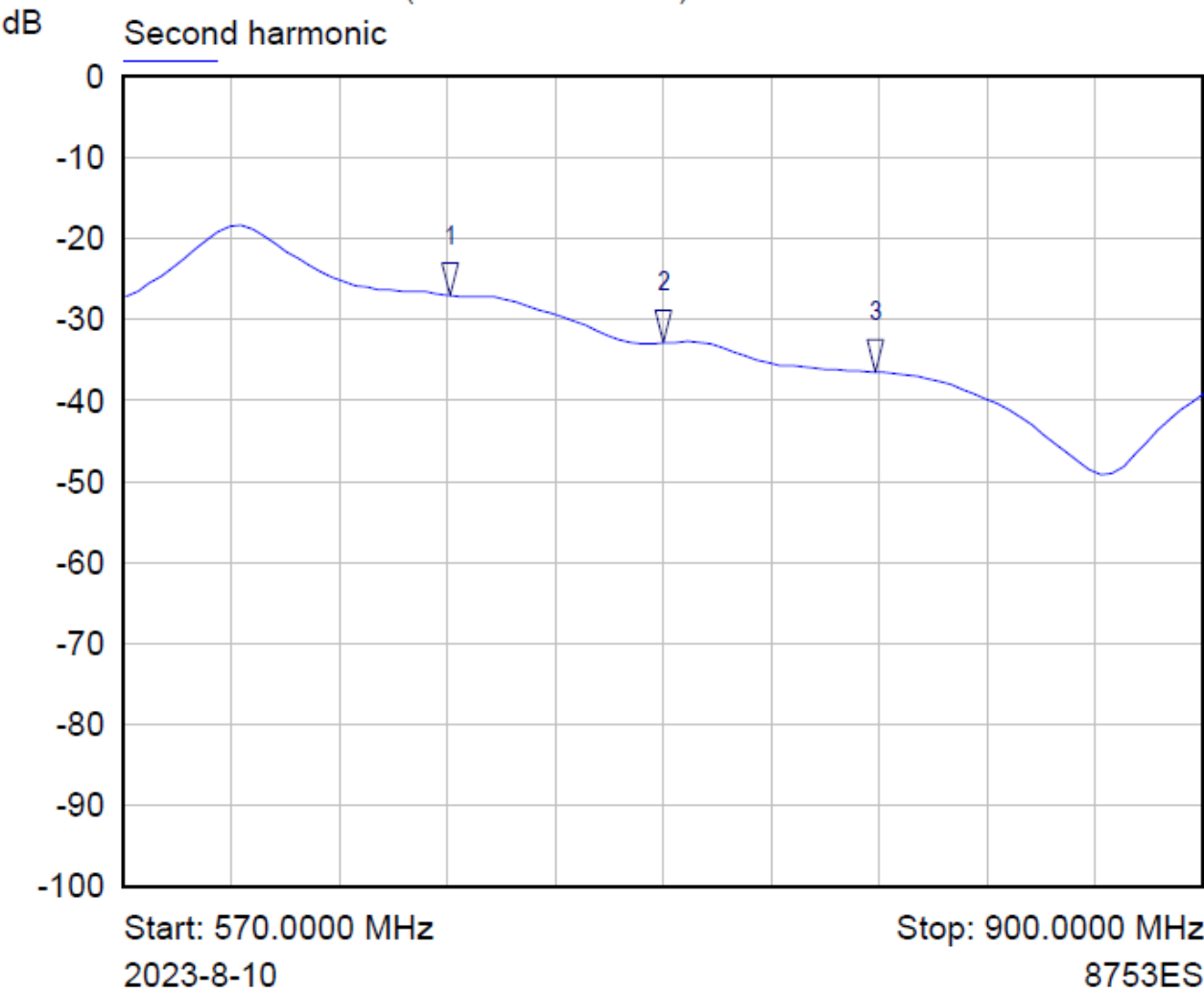
Parameter	Description
Operational Temperature	-40°C to +70°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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



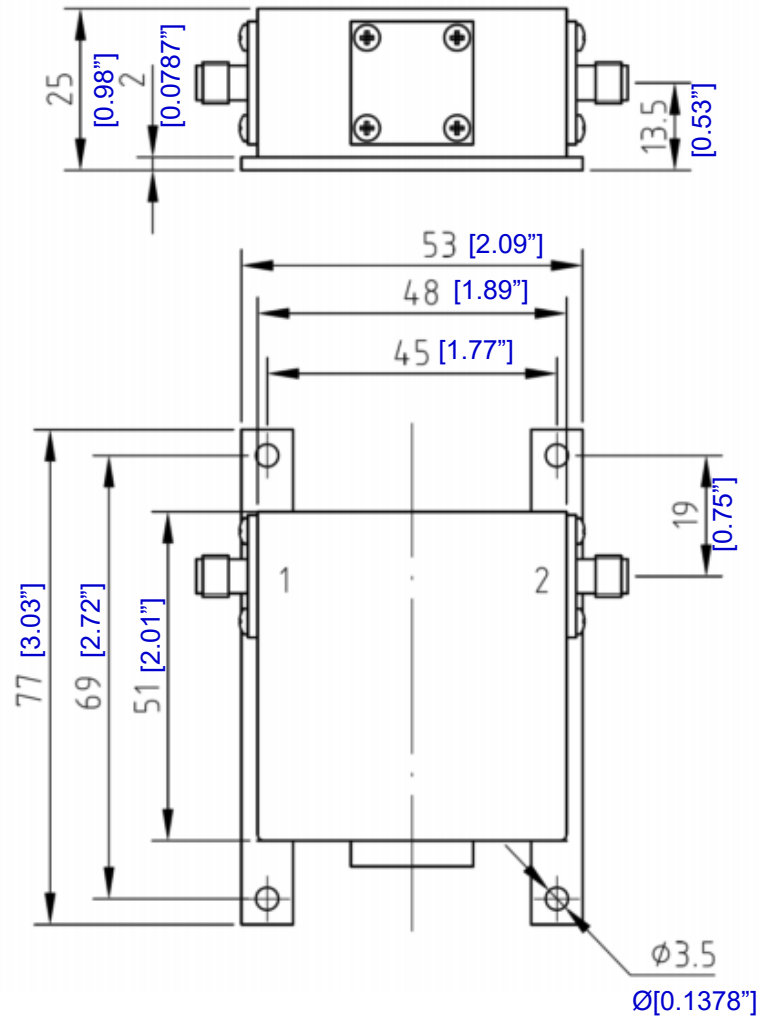
Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	367.5000 MHz	-20.57 dB	
2 ▾	S12	367.5000 MHz	-21.38 dB	
3 ▾	S21	367.5000 MHz	-0.17 dB	
4 ▾	S22	367.5000 MHz	-20.77 dB	

Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▾	Second harmonic	670.0000 MHz	-27.07 dB	
2 ▾	Second harmonic	735.0000 MHz	-32.91 dB	
3 ▾	Second harmonic	800.0000 MHz	-36.53 dB	

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy / Copper
2. Plating: Nickel
3. All dimensions are in millimeters [inches].

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
RFLI101M33M40L	Standard	335MHz-400MHz Coaxial Isolator

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