Ultra Wide Band Coaxial Isolator
0.7- 1GHz

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

Product Description

RFLI101M70G01 is an ultra wide band coaxial Isolator with a frequency range of 0.7 to 1GHz.

The Isolator has a typical isolation of 17dB. The maximum insertion loss is 0.9dB.

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

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	0.7		1	GHz
Insertion Loss			0.9	dB
Isolation (Note 1)	17			dB
VSWR			1.29	:1
Forward Power (CW)			50	W
Reverse Power (CW)			5	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Connectors		(RFLI101M70G01S) SMA-Female (RFLI101M70G01N) N-Female		
Impedance		50		Ω

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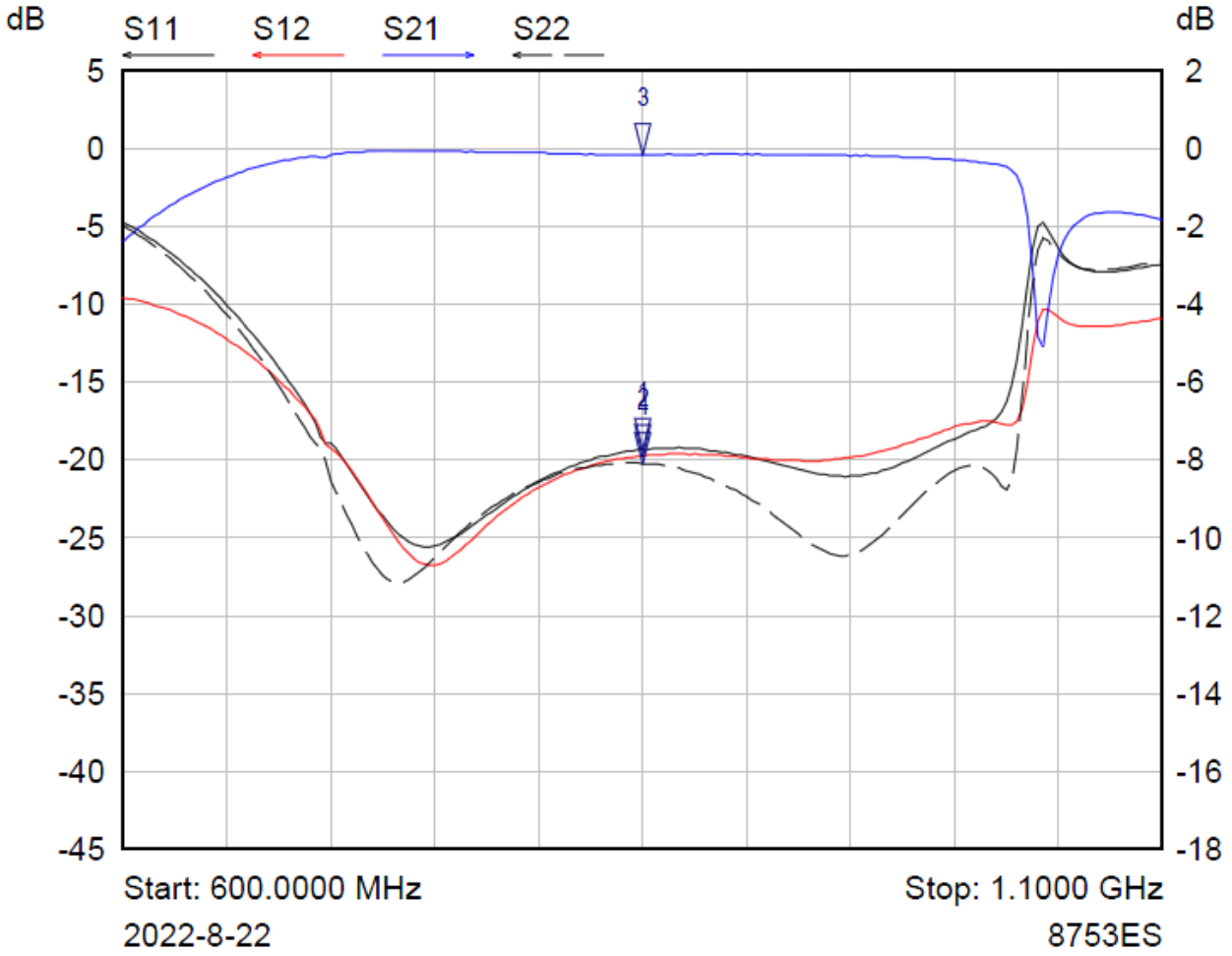
Environmental Specifications and Test Standards

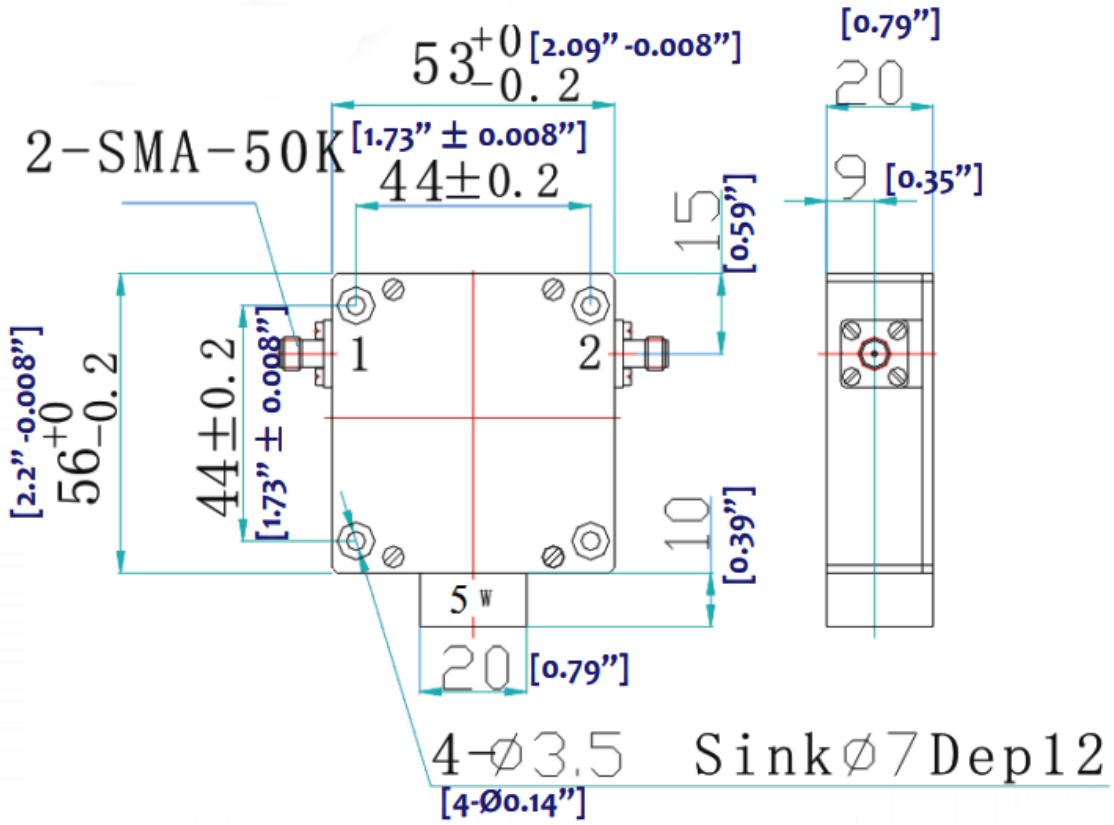
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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	850.0000 MHz	-19.30 dB	
2 ▽	S12	850.0000 MHz	-19.73 dB	
3 ▽	S21	850.0000 MHz	-0.16 dB	
4 ▽	S22	850.0000 MHz	-20.21 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy / Copper
2. Finish: Nickel Plated
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
RFLI101M70G01S	SMA Female Connectors	0.7GHz-1GHz Coaxial Isolator
RFLI101M70G01N	N Female Connectors	0.7GHz-1GHz Coaxial Isolator

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