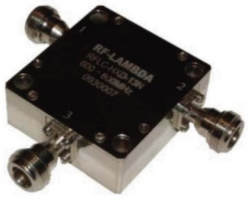
Wide Band Coaxial Circulator
610MHz - 970MHz



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

Product Description

RFLC101M61M97 is a Wide Band Coaxial Circulator with a frequency range of 610 to 970MHz.

The circulator has a typical isolation of 15dB. The maximum insertion loss is 0.6dB.

The operating temperature of this product is within -30 to +70ºC

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℃)

Parameter	Min.	Typ.	Max.	Units
Frequency Range		610 -970		MHz
Insertion Loss			0.6	dB
Isolation (Note 1)	15			dB
VSWR			1.43	:1
Power Handling (CW)			20	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		RFLC101M61M97S (SMA–Female) RFLC101M61M97N (N–Female)		
Impedance		50		Ω

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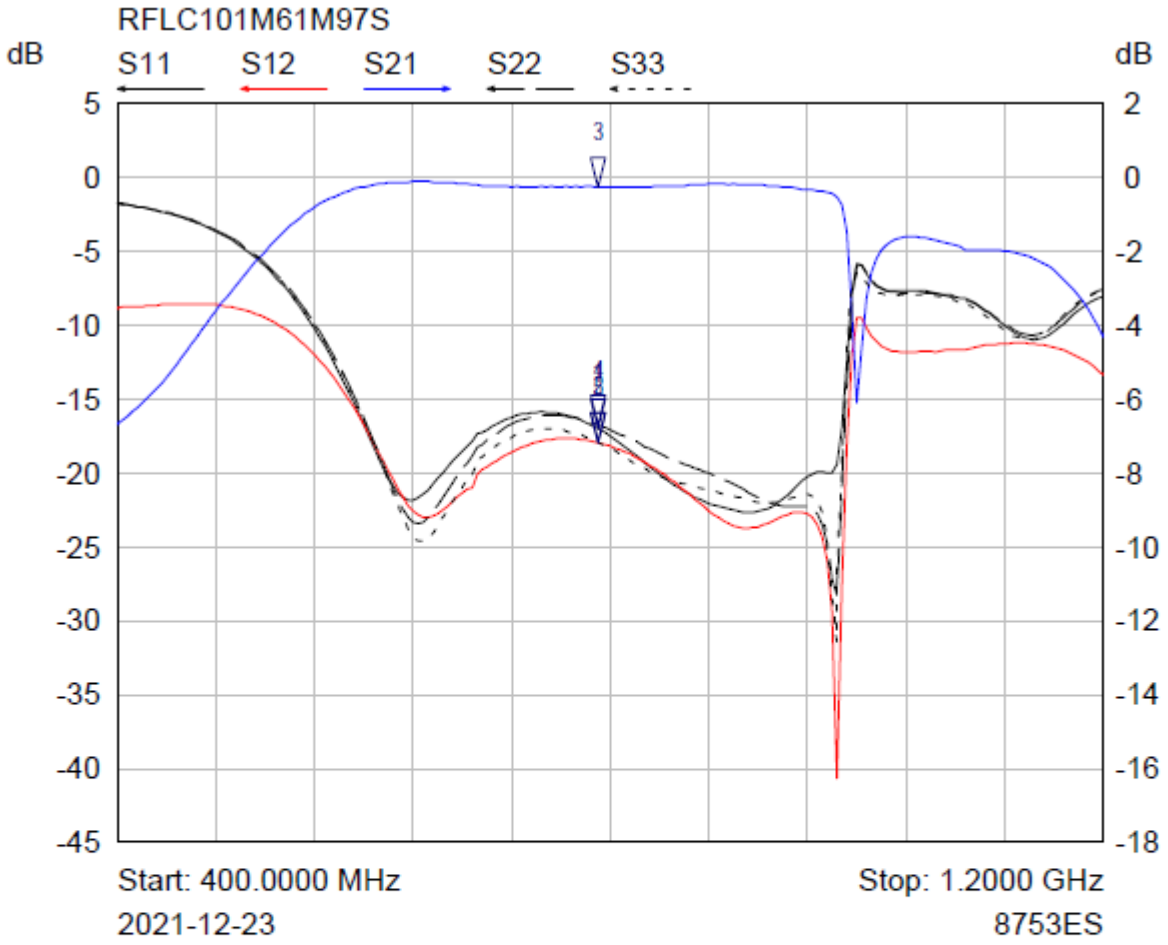
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-30ºC to +70ºC (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	790.0000 MHz	-16.99 dB	
2 ▽	S12	790.0000 MHz	-17.94 dB	
3 ▽	S21	790.0000 MHz	-0.26 dB	
4 ▽	S22	790.0000 MHz	-16.73 dB	
5 ▽	S33	790.0000 MHz	-17.93 dB	

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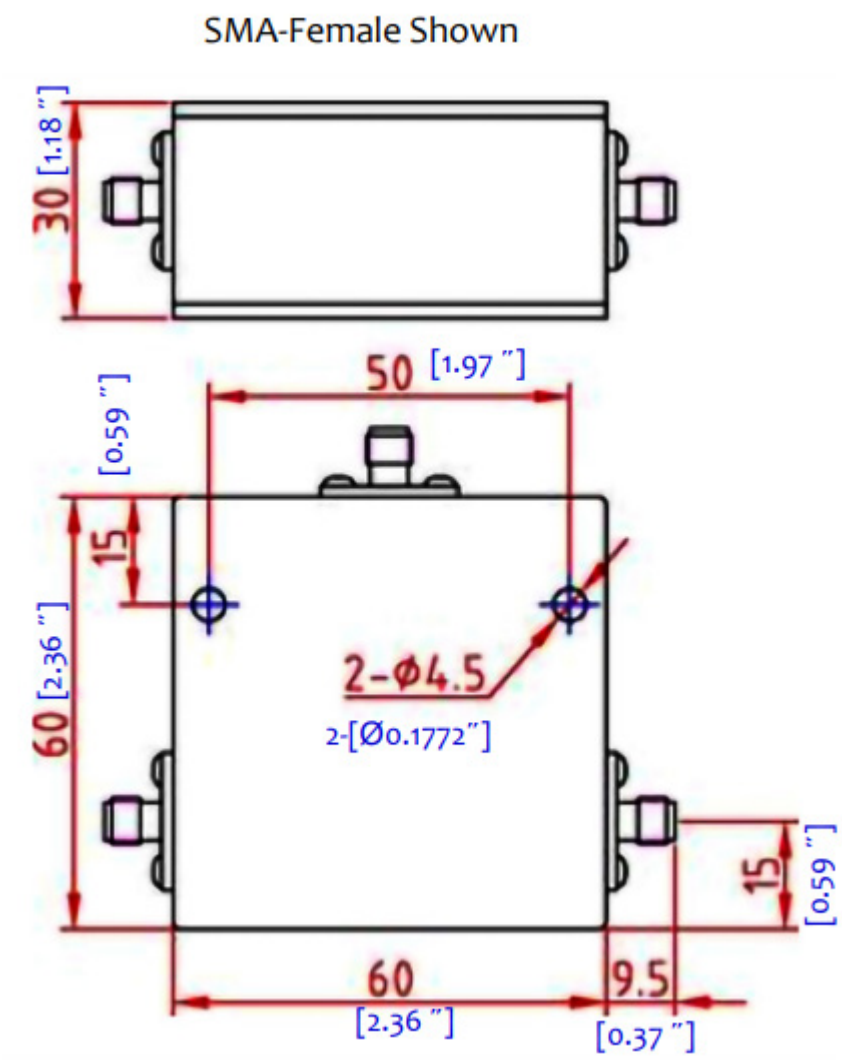
Outline Drawing

All dimensions are in millimeters [inches]



Notes:
1. Package Material: Aluminum Alloy
2. 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
RFLC101M61M97S	SMA Female Connectors	610MHz-970MHz Wide Band Coaxial Circulator
RFLC101M61M97N	N Female Connectors	610MHz-970MHz Wide Band Coaxial Circulator

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