Ultra Wide Band Coaxial Circulator
335 - 535MHz

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

Product Description

RFLC335M535M is a wide band coaxial circulator with a frequency range of 335 to 535MHz.

The circulator has a typical isolation of 17dB. The maximum insertion loss is 0.9dB.The circulator has good isolation performance.

The circulator input and output connectors are SMA Female or N-Female.

Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- Aerospace and military applications
- LMDS multi-carrier operation
- 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=+25ºC)

Parameter	Min	Typ	Max	Units
Frequency Range		335 – 535		MHz
Insertion Loss			0.9	dB
Isolation	17			dB
VSWR			1.4	:1
Power Handling (CW)			50	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Input / Output Connectors		SMA-Female---RFLC335M535MS N-Female---RFLC335M535MN		
Weight		--		lbs.
Impedance		50		Ω

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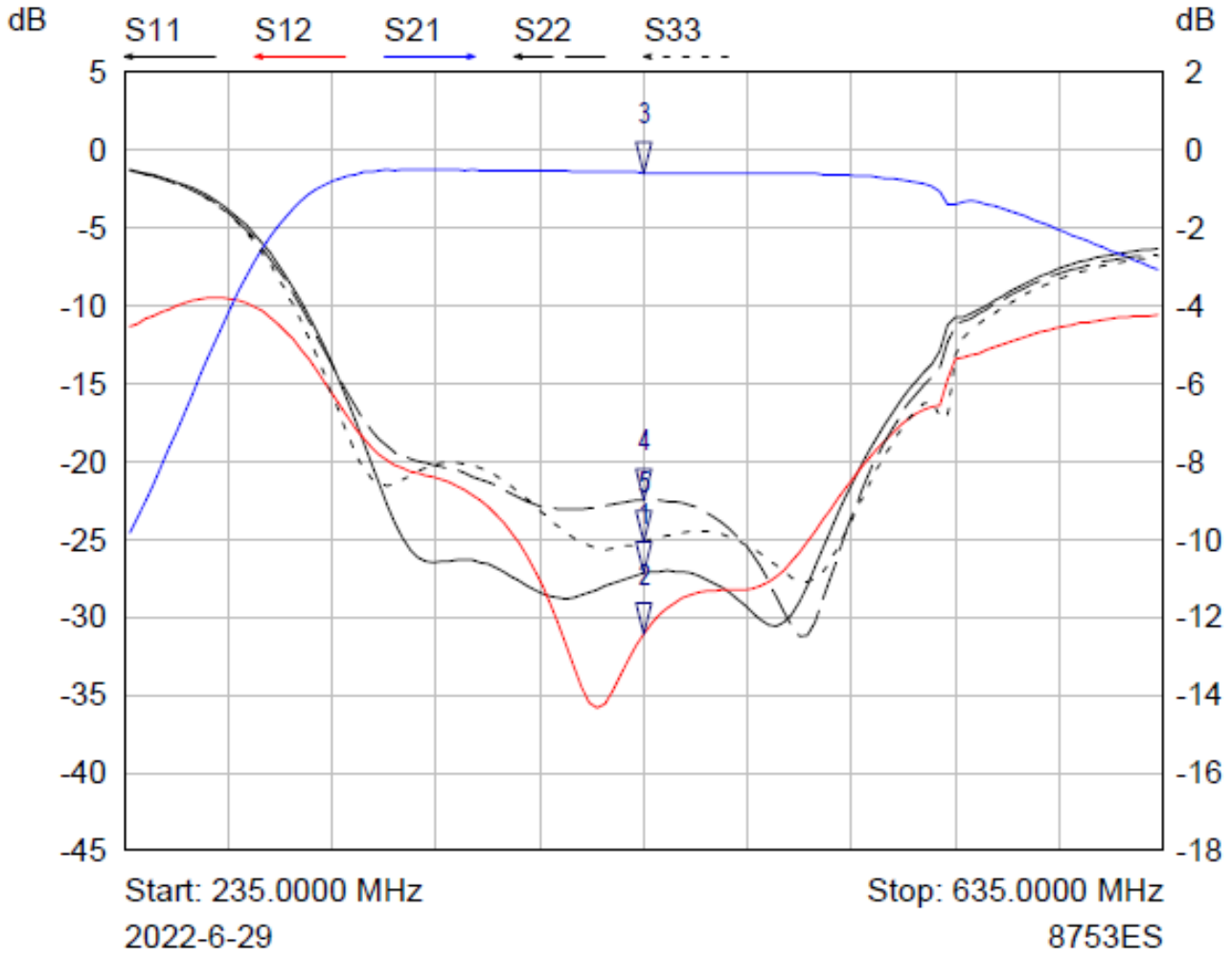
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20ºC to +70ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-40ºC → +70ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for 72 Hours
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)

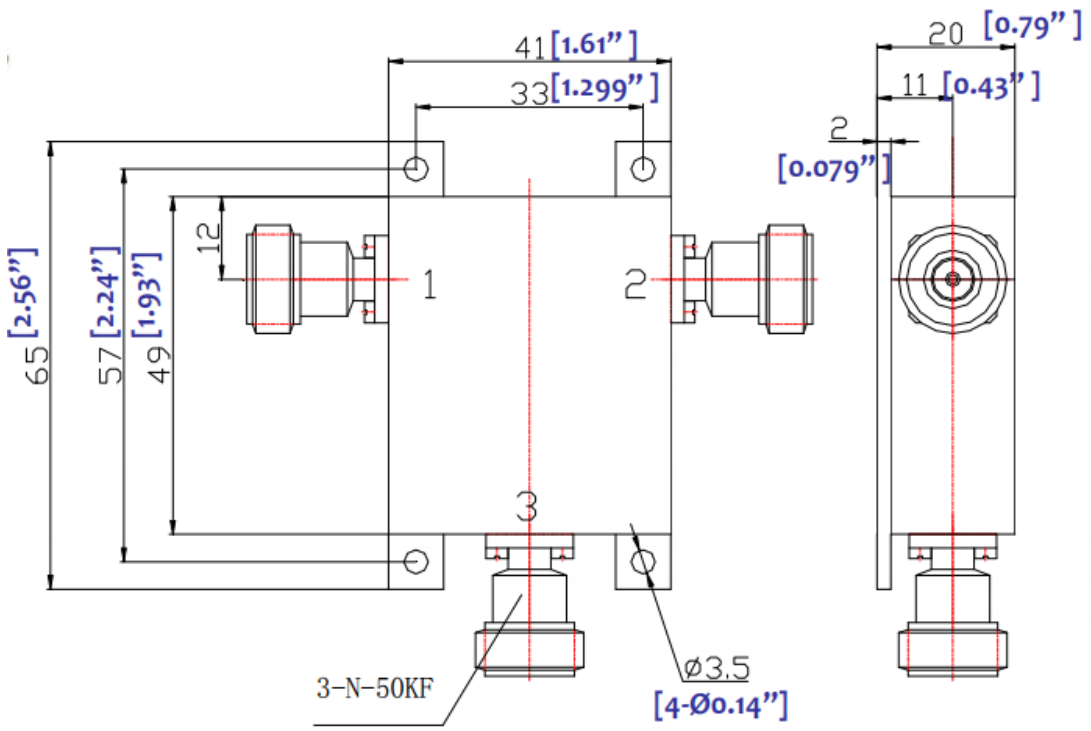
Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	435.0000 MHz	-27.17 dB	
2 ▽	S12	435.0000 MHz	-31.05 dB	
3 ▽	S21	435.0000 MHz	-0.59 dB	
4 ▽	S22	435.0000 MHz	-22.48 dB	
5 ▽	S33	435.0000 MHz	-25.16 dB	

Outline Drawing

N-Female Version Shown



Notes:
1. Package Material: Aluminum Alloy
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
RFLC335M535M	SMA-Female or N-Female	335MHz-535MHz Circulator

Important Notice

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