

Ultra Wide Band Coaxial Circulator 0.95GHz-1.3GHz



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

Product Description

RFLC202M95G13 is an ultra wide band coaxial circulator with a frequency range of 0.95 to 1.3GHz.

The circulator has a typical isolation of 19dB. The maximum insertion loss is 0.4dB.

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

Features

- High power handling up to 200W
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

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

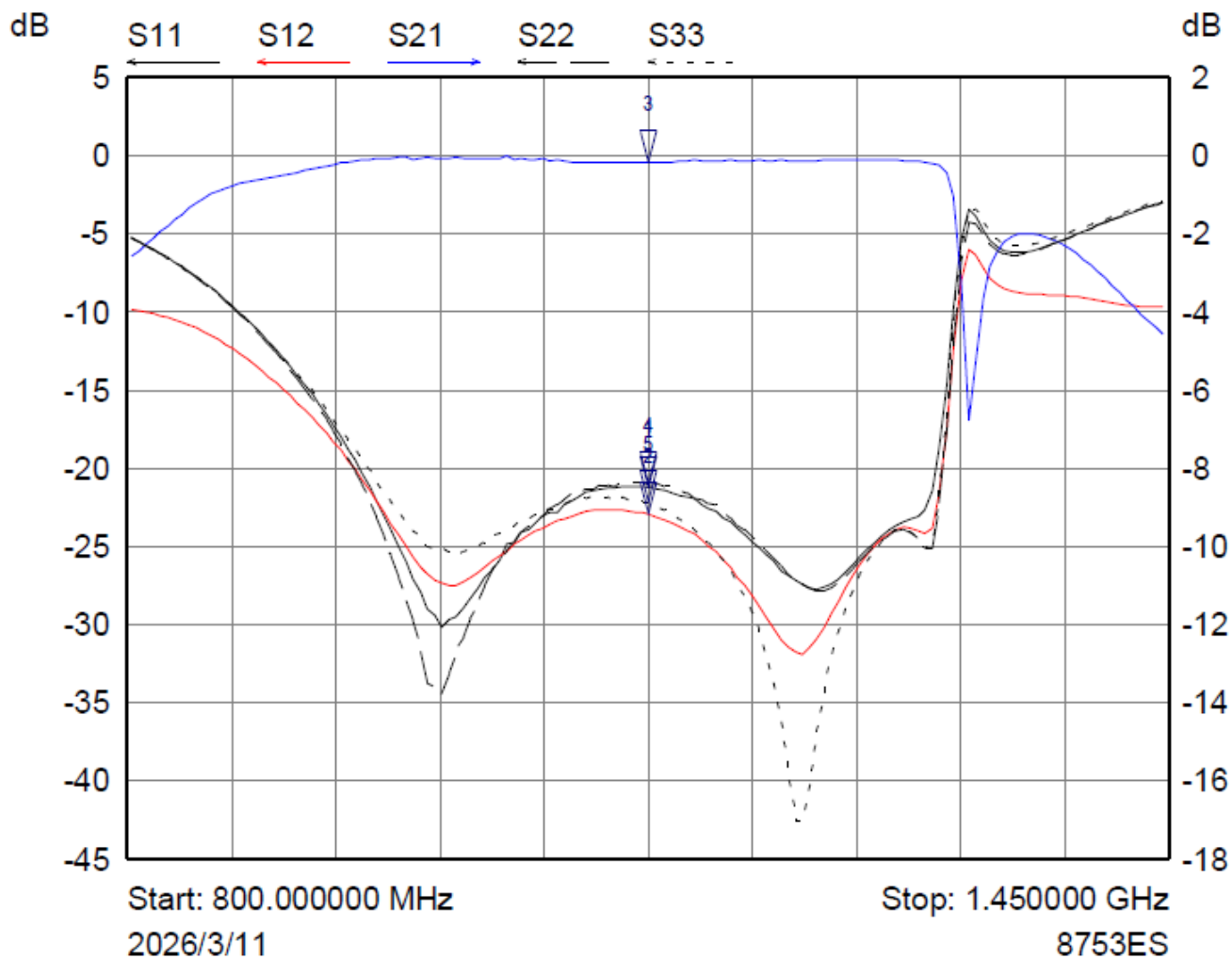
Electrical Specifications(T_A=25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		0.95 – 1.3		GHz
Insertion Loss			0.40	dB
Isolation	19			dB
VSWR			1.29	:1
Power Handling (CW)			200 N-Type 100 SMA	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		RFLC202M95G13S – SMA-Female RFLC202M95G13N – N-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)

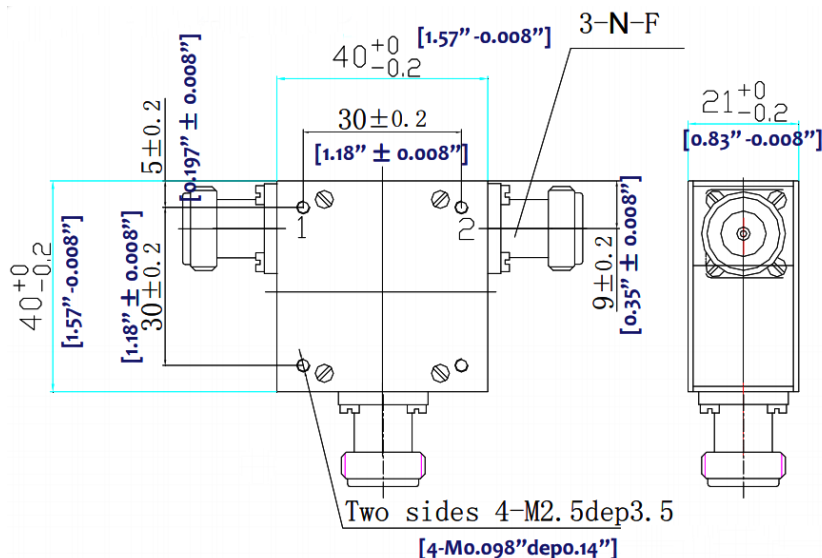
Typical Performance Plots



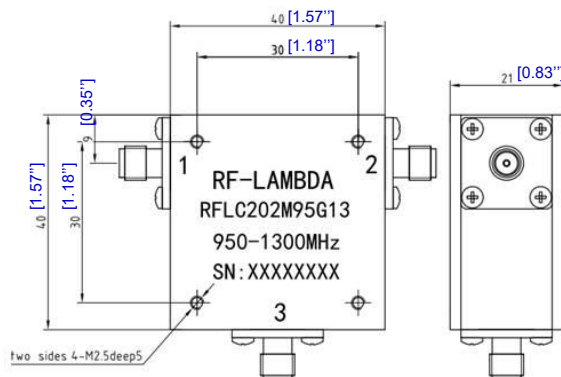
Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	1.125000 GHz	-21.2239 dB	
2 ▾	S12	1.125000 GHz	-22.9505 dB	
3 ▾	S21	1.125000 GHz	-0.1527 dB	
4 ▾	S22	1.125000 GHz	-21.0252 dB	
5 ▾	S33	1.125000 GHz	-22.1605 dB	

Outline Drawing

N-Female Version



SMA Female Version



Notes:

1. Package Material: Aluminum Alloy
2. Finish: Nickel Plated
3. All dimensions are in millimeters [inches]
4. Standard torque wrench must be used to secure RF connectors.

Additional Information

Documentation

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

Webpage

Ordering Information

Part Number	Modification	Description
RFLC202M95G13S	SMA-Female	0.95GHz-1.3GHz Coaxial Circulator
RFLC202M95G13N	N-Female	0.95GHz-1.3GHz Coaxial Circulator

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