Wide Band Coaxial Circulator
1.63GHz - 2.63GHz

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

Product Description

RFLC301G16G26 is a wide band coaxial circulator with a frequency range of 1.63 to 2.63GHz.

The circulator has a minimum isolation of 21dB. The maximum insertion loss is 0.4dB.

The operating temperature of this product is within -10 ºC to +80ºC

Features

- High power handling up to 100W
- 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℃)

Parameter	Min	Typ	Max	Units
Frequency Range		1.63-2.63		GHz
Insertion Loss		0.35	0.4	dB
Isolation	21			dB
VSWR		1.19	1.25	:1
Forward Power			100	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		RFLC301G16G26S (SMA-Female) RFLC301G16G26N (N-Female)		
Impedance		50		Ω

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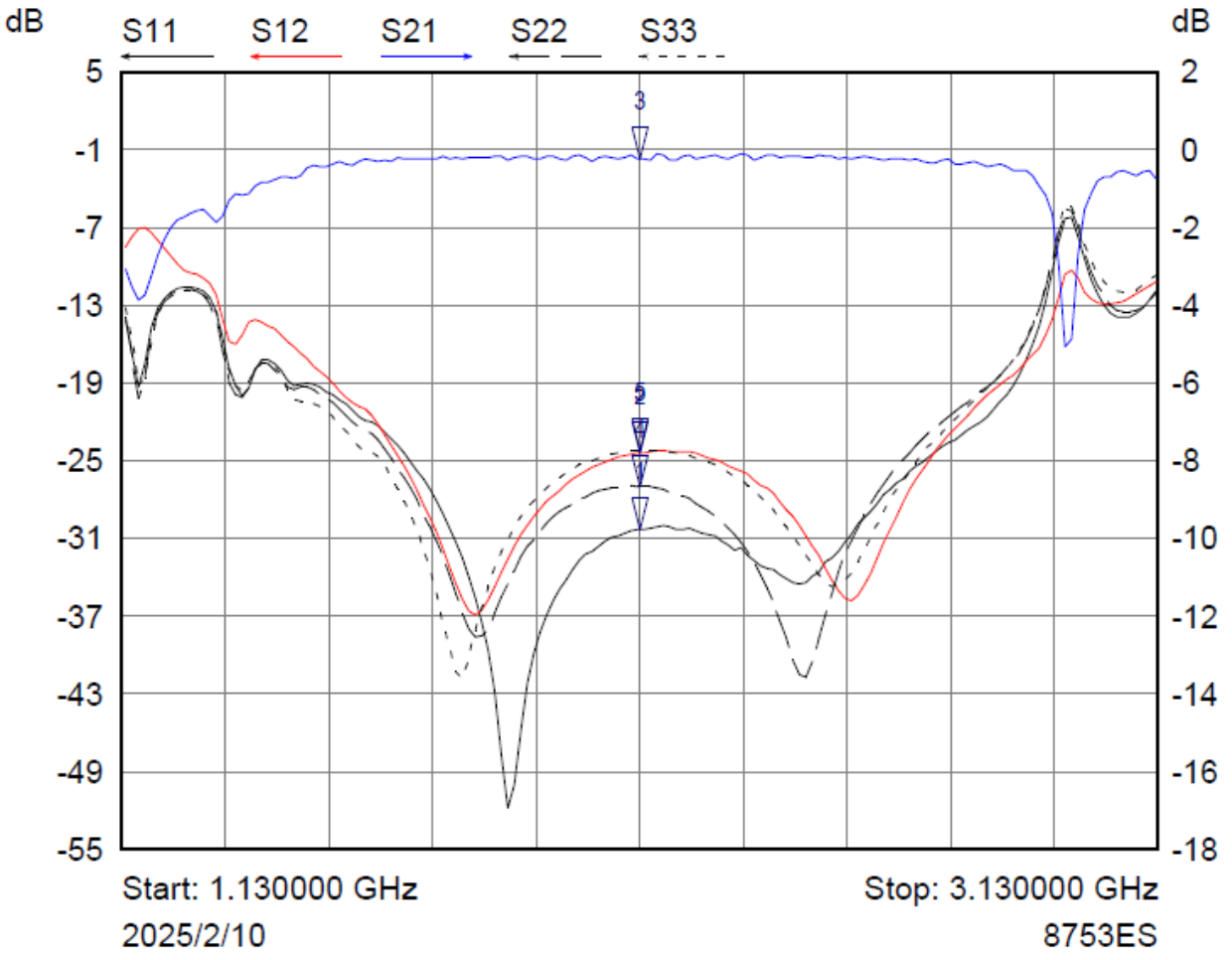
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-10ºC to +80ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-10ºC → +80ºC (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)

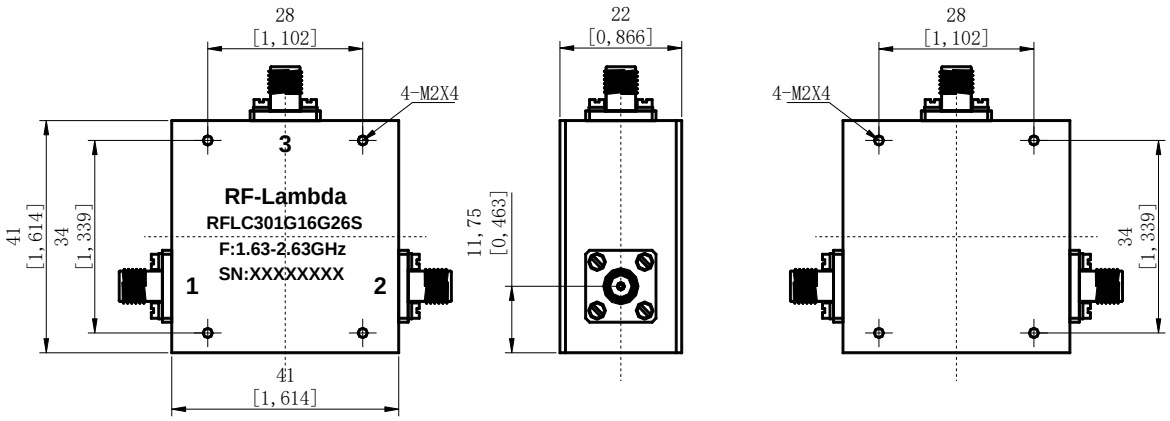
Typical Performance Plots



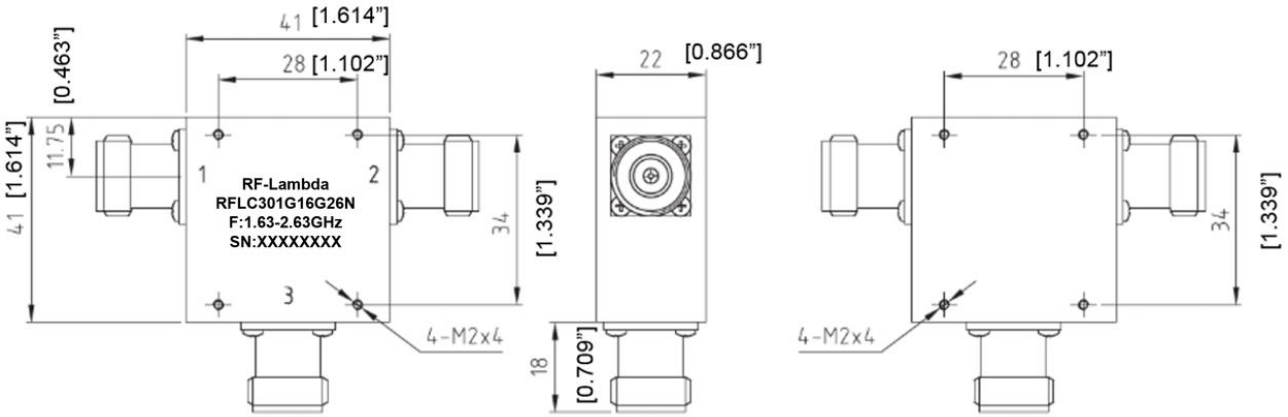
Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	2.130000 GHz	-30.2983 dB	
2 ▽	S12	2.130000 GHz	-24.4056 dB	
3 ▽	S21	2.130000 GHz	-0.2323 dB	
4 ▽	S22	2.130000 GHz	-26.9818 dB	
5 ▽	S33	2.130000 GHz	-24.1952 dB	

Outline Drawing

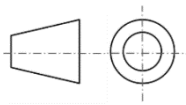
SMA-Type Version



N-Type Version



Notes:
1. Package Material: Aluminum Alloy / Copper
2. Finish: Nickel Plated
3. All dimensions are in millimeters [inches].
4. Outline Tolerances ±0.5 [0.02], Mounting Hole Tolerances ±0.2 [0.008] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



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
RFLC301G16G26S	Connectors SMA-Female	1.63GHz - 2.63GHz Wide Band Coaxial Circulator
RFLC301G16G26N	Connectors N-Female	1.63GHz - 2.63GHz Wide Band Coaxial Circulator

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