High Power Coaxial Circulator
4.45GHz - 4.75 GHz

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

Product Description

The RFC26-600-4600M is a high power coaxial circulator with a frequency range of 4.45 to 4.75GHz.

The circulator has a typical isolation of 21dB. The maximum insertion loss is 0.3dB.

The circulator input and output connectors are N-Female.

Features

- High power handling up to 600W
- Wide band operation
- 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=+25ºC)

Parameter	Min	Typ	Max	Units
Frequency Range		4.45 -4.75		GHz
Insertion Loss			0.3	dB
Isolation	21			dB
VSWR			1.2	: 1
Forward Power			600	W
Rotation		Clockwise		
Input / Output Connectors		N–Female		
Impedance		50		Ω

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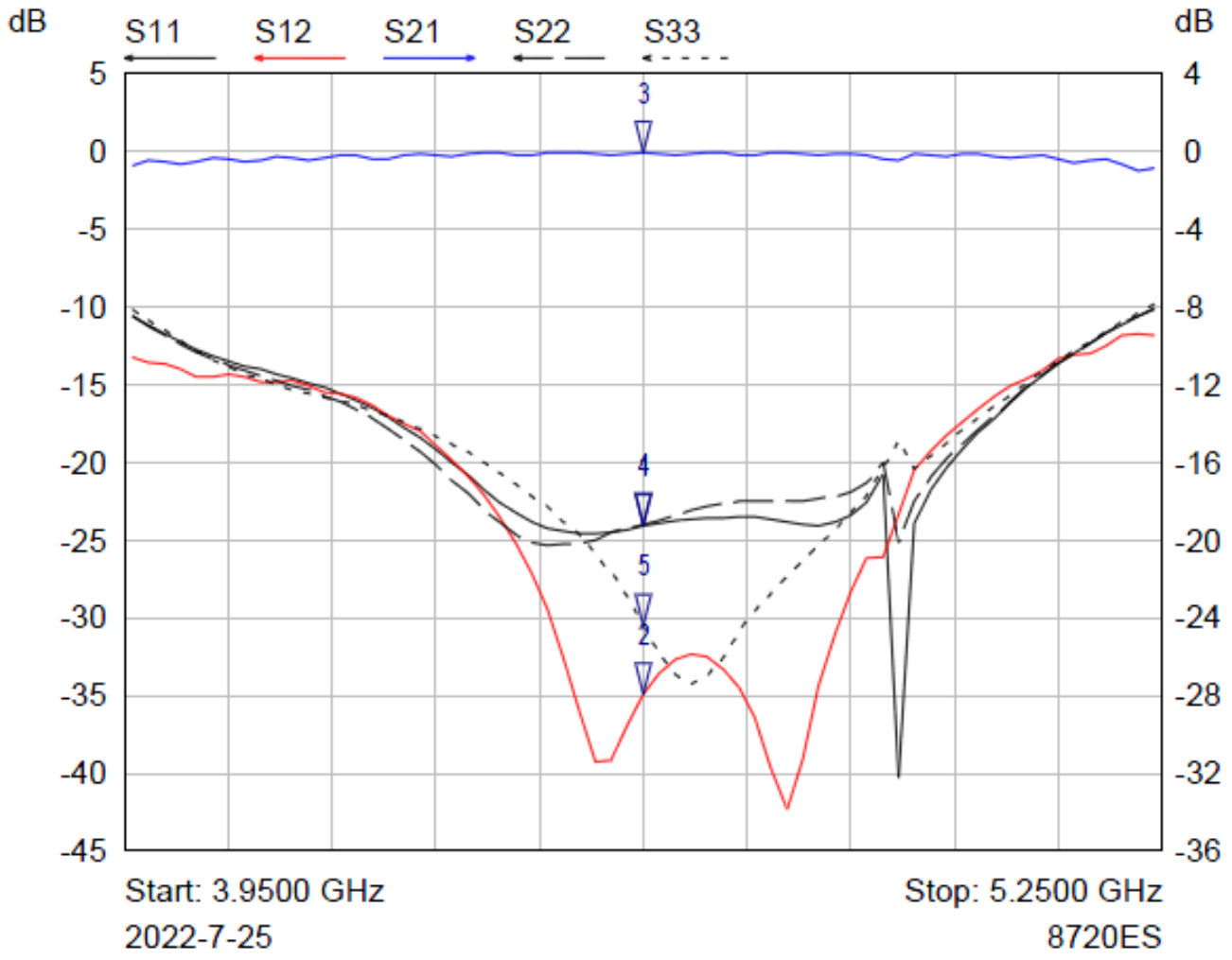
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20ºC to +50ºC (Appropriate measures should be taken to ensure the surface temperature should be less than 80 °C)
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)

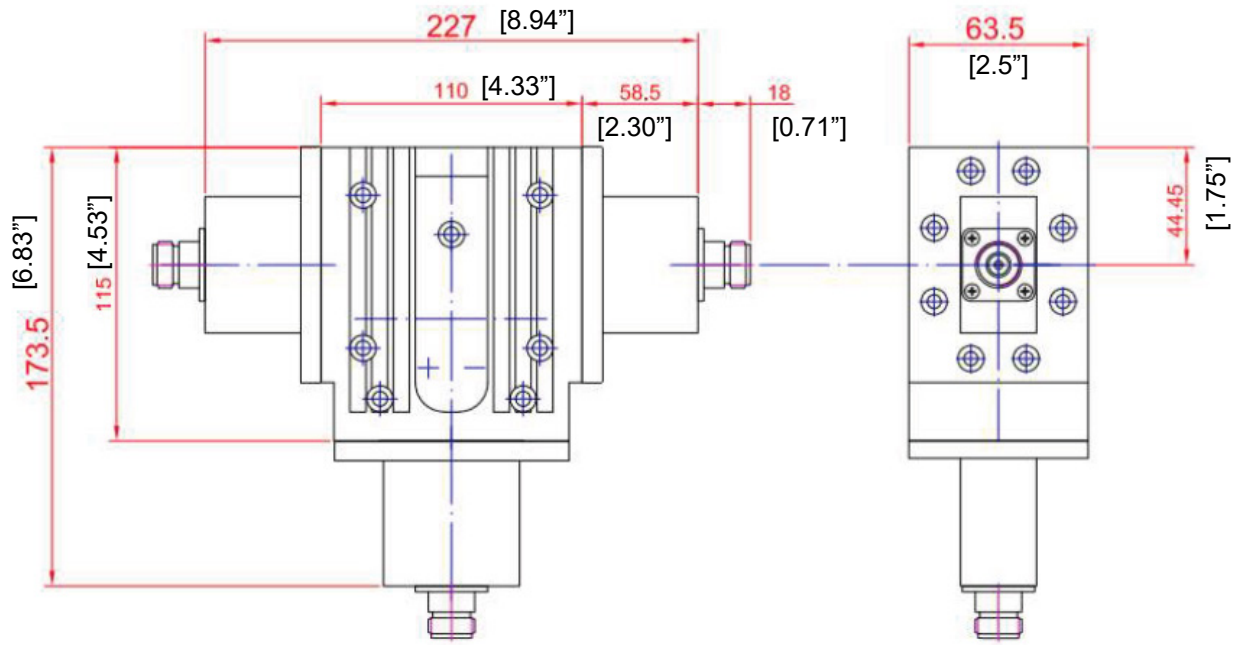
*For vibration testing details please see additional information section.

Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	4.6000 GHz	-24.12 dB	
2 ▽	S12	4.6000 GHz	-34.88 dB	
3 ▽	S21	4.6000 GHz	-0.06 dB	
4 ▽	S22	4.6000 GHz	-24.01 dB	
5 ▽	S33	4.6000 GHz	-30.48 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy
2. Finish: Black Paint
3. All dimensions are in millimeters [inches].
4. Tolerance ±0.25 [0.01].unless otherwise specified

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
RFC26-600-4600M	Connectors N-Female	4.45GHz-4.75GHz Coaxial Circulator

Important Notice

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