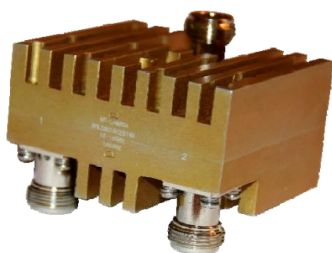


150W Wide Band High Power Circulator 12GHz-18GHz



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

Product Description

RFLC601G12G18H is a high power coaxial circulator with a frequency range of 12 to 18GHz.

The circulator has a typical isolation of 17dB. The maximum insertion loss is 0.6dB.

The circulator input and output connectors are N-Female.

Features

- High power handling up to 150W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- 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=+25°C)

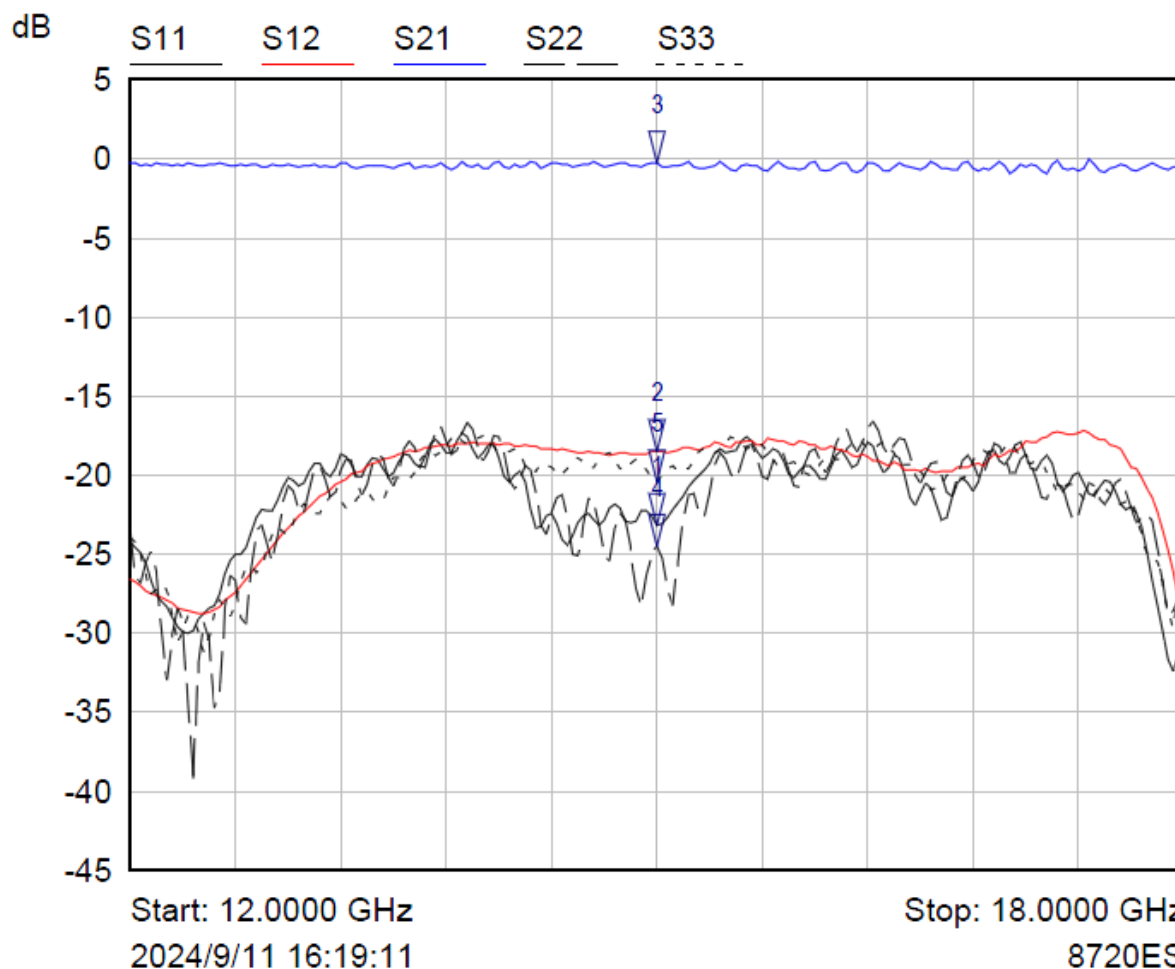
Parameter		Min.	Typ.	Max.	Units
Frequency Range			12-18		GHz
Insertion Loss				0.6	dB
Isolation (Note 1)		17			dB
VSWR				1.33	:1
Power	Average		150		W
	Peak		15 (0.2% duty Cycle 25us pulse width)		KW
Rotation			Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors			N-Female		
Impedance			50		Ω

Environmental Specifications and Test Standards

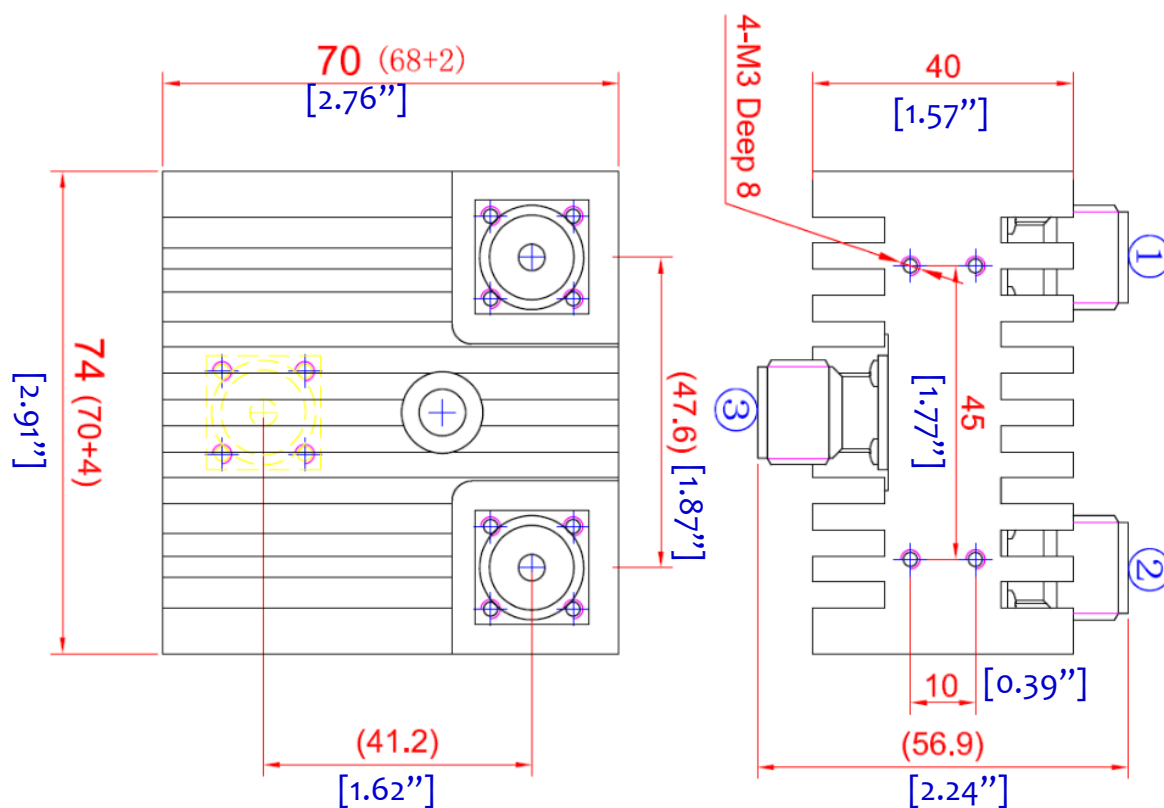
Parameter	Description
Operational Temperature	-20°C to +70°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
*Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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)

*For vibration testing details please see additional information section.

Typical Performance Plots



Outline Drawing



Notes:

1. Package Material: Aluminum alloy
2. Finish: Nickel Plated/Gold Plated
3. All dimensions are in millimeters [inches].

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
RFLC601G12G18H	Connectors N-Female	12GHz-18GHz High Power Circulator

Important Notice

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