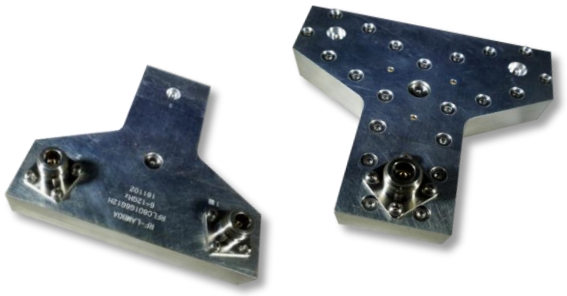
150W Wide Band High Power Circulator
6 - 12GHz



Product Description

RFLC601G6G12H is a 150W wide band high power circulator with a frequency range of 6 to 12GHz.

The circulator has a typical isolation of 16dB. The maximum insertion loss is 0.8dB.

The operating temperature of this product is within -20 to +50ºC

Features

- High power handling up to 150W
- 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℃)

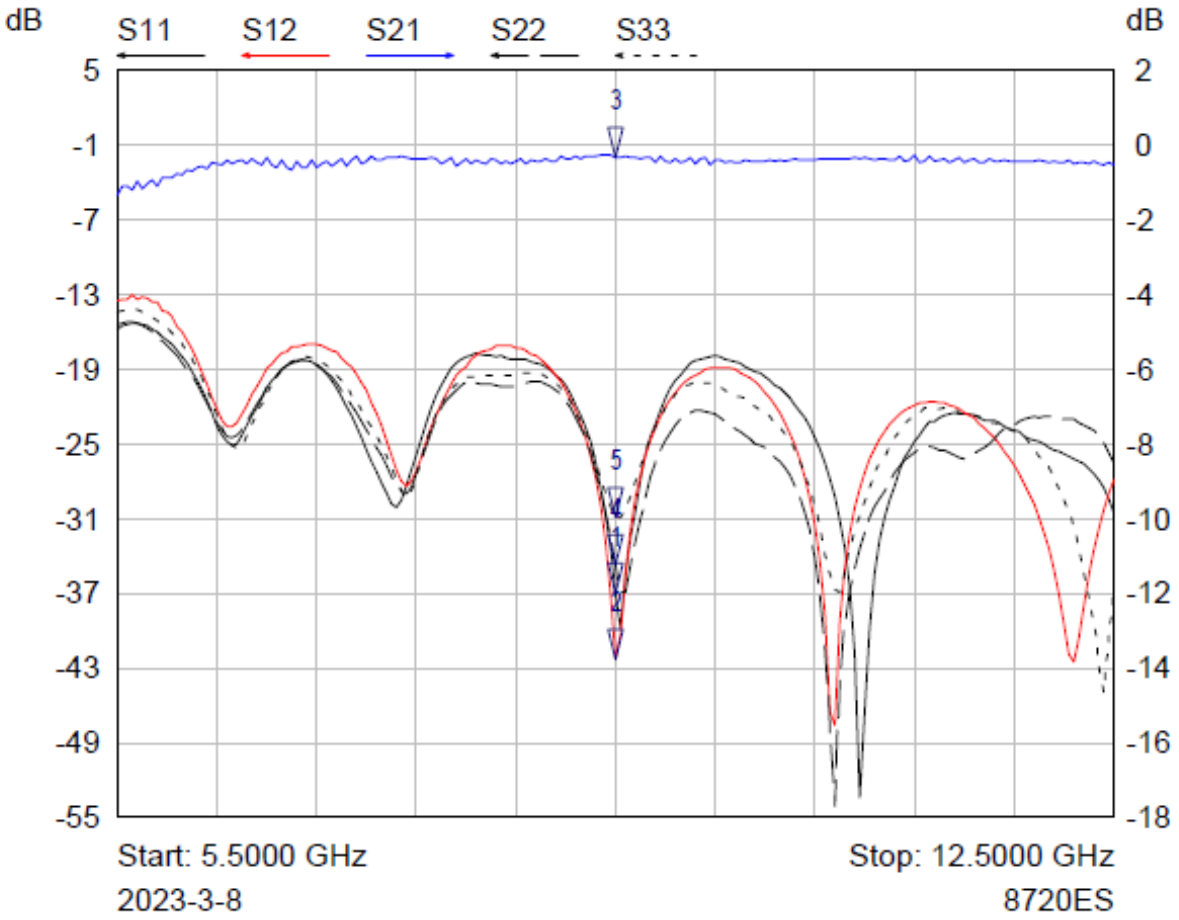
Parameter	Min.	Typ.	Max.	Units
Frequency Range		6-12		GHz
Insertion Loss		0.65	0.8	dB
Isolation	16	17		dB
VSWR		1.30	1.35	:1
Forward Power (CW)			150	W
Reverse Power (CW)			150	W
Peak Power			1200	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Input / Output Connectors		N-Female		
Impedance		50		Ω

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com

Environmental Specifications and Test Standards

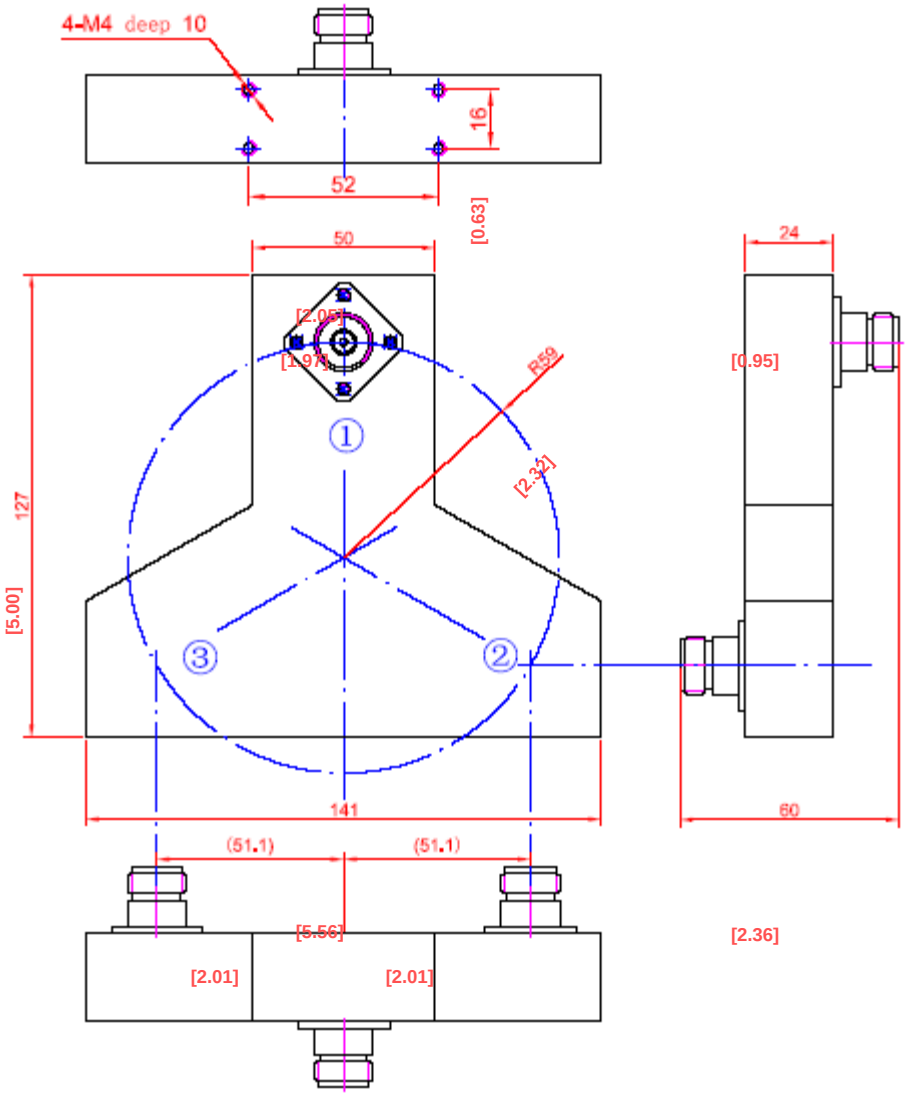
Parameter	Description
Operational Temperature	-20ºC to +50ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms,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

Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	9.0000 GHz	-37.04 dB	
2 ▽	S12	9.0000 GHz	-42.27 dB	
3 ▽	S21	9.0000 GHz	-0.33 dB	
4 ▽	S22	9.0000 GHz	-34.69 dB	
5 ▽	S33	9.0000 GHz	-30.86 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy
2. Finish: Oxidation
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
RFLC601G6G12H	N Female Connectors	6GHz-12GHz High Power Circulator

Important Notice

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com