Drop in Circulator
4.4GHz - 4.9GHz

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

Product Description

RFLC-404-2-4.4G4.9G is a drop in circulator with a frequency range of 4.4 to 4.9GHz.

The circulator has an isolation of 20dB. The maximum insertion loss is 0.3dB. The circulator has good isolation performance.

The operating temperature of this product is from -40 to +85ºC

Features

- High power handling up to 15W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- High peak to average handling capability
- 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

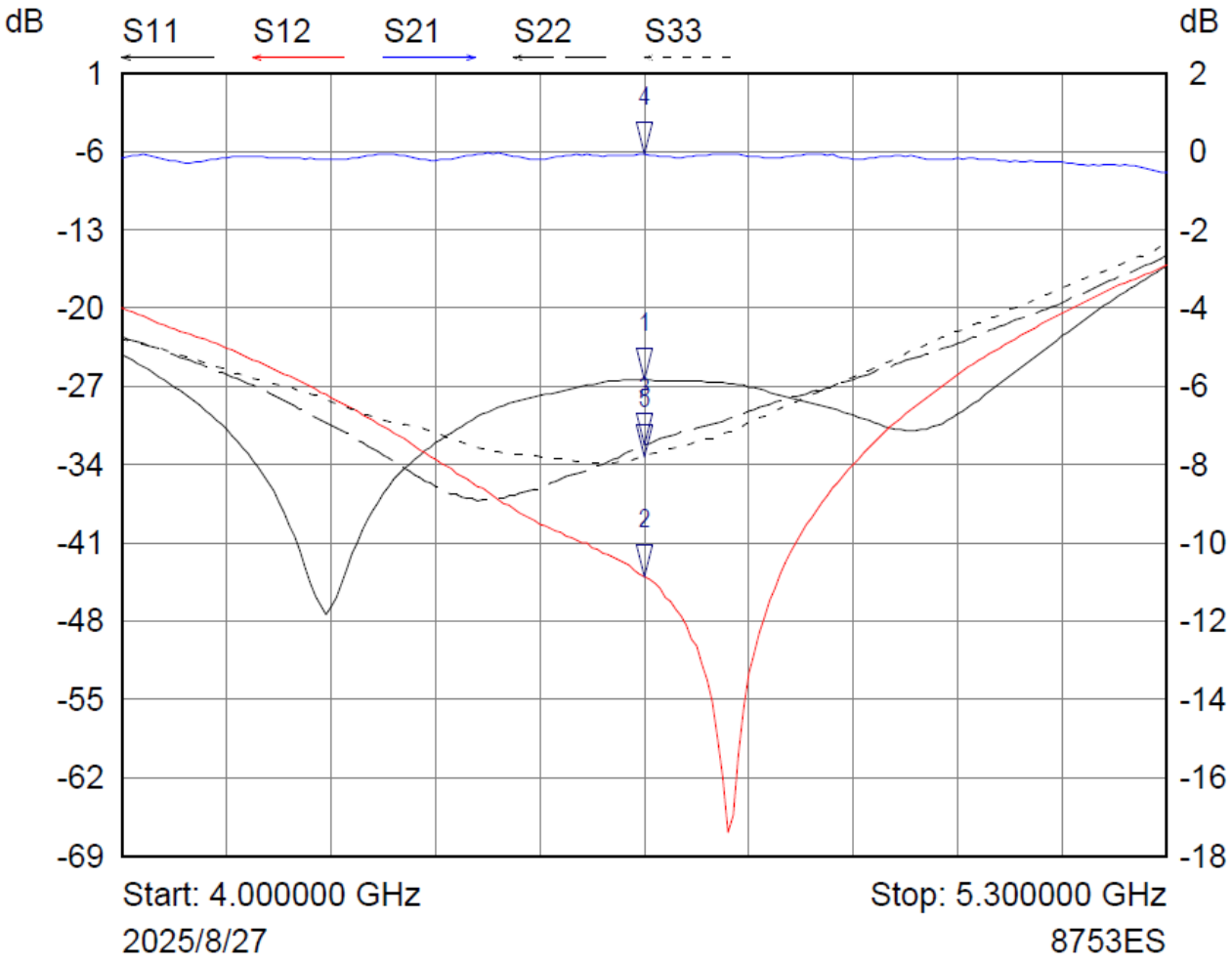
Electrical Specifications(T_A=25℃)

Parameter	Min	Typ	Max	Units
Frequency Range		4.4 - 4.9		GHz
Insertion Loss			0.3	dB
Isolation	20			dB
VSWR			1.25	:1
Power Handling			15	W
Rotation		Counter Clockwise		
Input / Output Connectors		Drop in		
Impedance		50		Ω

Environmental Specifications and Test Standards

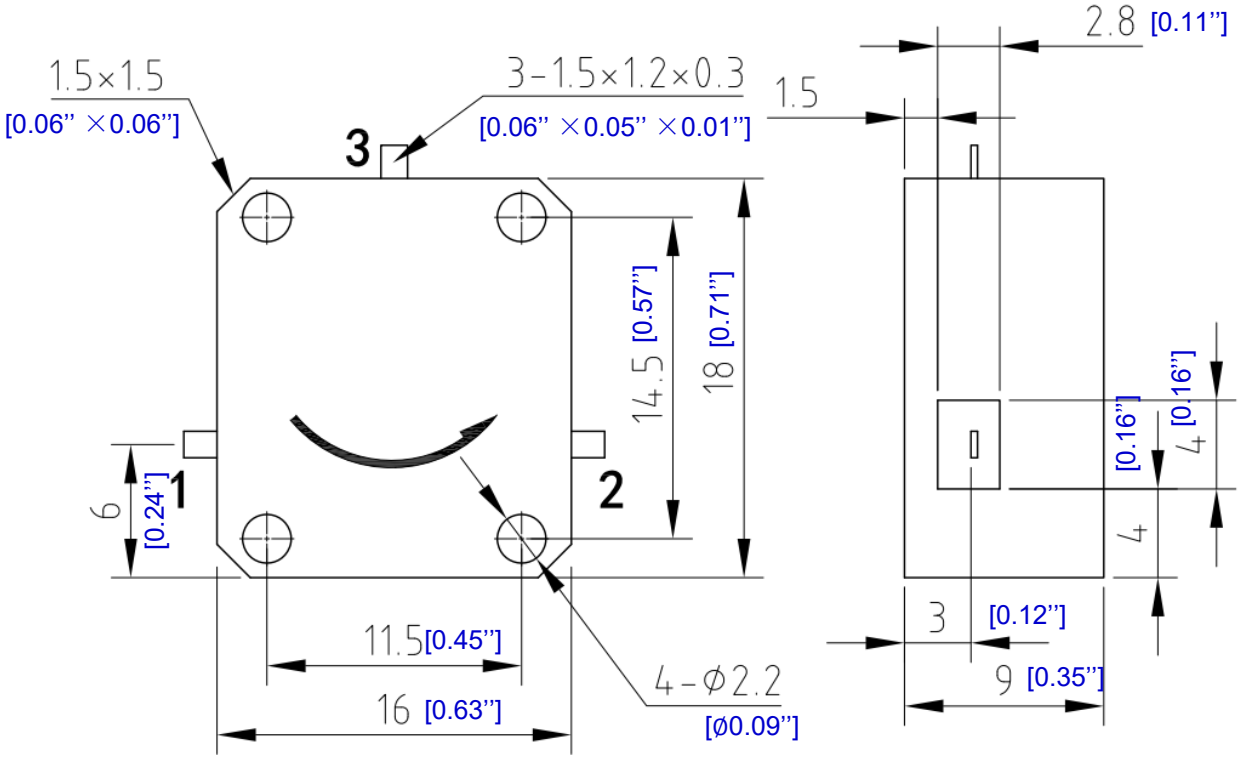
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-55ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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	4.650000 GHz	-26.4388 dB	
2 ▽	S12	4.650000 GHz	-44.0752 dB	
3 ▽	S22	4.650000 GHz	-32.2441 dB	
4 ▽	S21	4.650000 GHz	-0.0753 dB	
5 ▽	S33	4.650000 GHz	-33.3073 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy
2. Finish : Nickel Plated
3. All dimensions are in millimeters
4. Tolerance ±0.25.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
RFLC-404-2-4.4G4.9G	Connectors Drop in	4.4GHz-4.9GHz Drop in Circulator

Important Notice

RF-LAMBDA USA LLC: www.rflambda.com
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