

Ultra Wide Band Coaxial Isolator 6 - 18GHz



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

Product Description

The RFLI601G06G18 is an ultra wide band coaxial isolator with a frequency range of 6 to 18GHz.

The Isolator has a typical isolation of 12dB. The maximum insertion loss is only 2dB.

The input and output connectors are SMA-Female.

Features

- High power handling up to 1W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- Aerospace and military applications
- LMDS multi-carrier operation

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

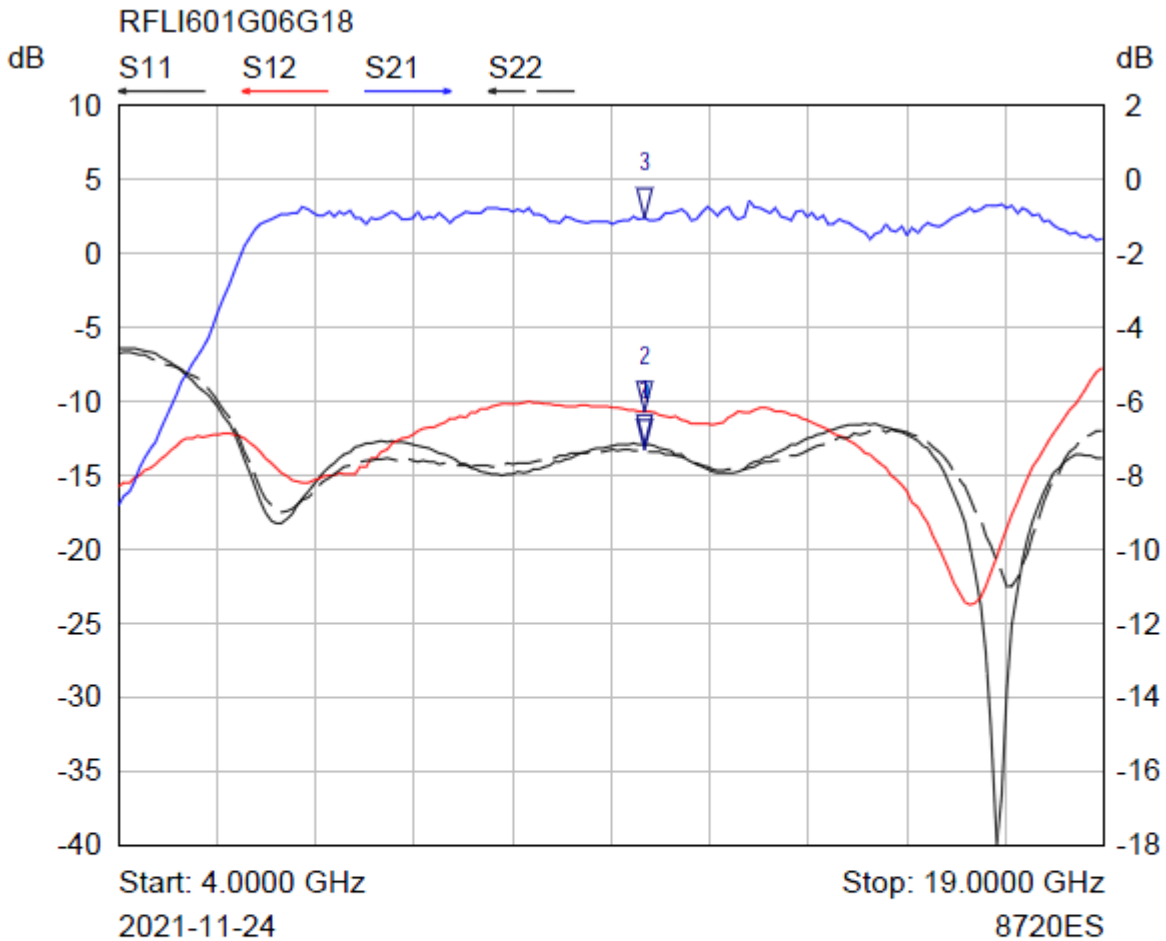
Electrical Specifications (T_A=+25°C)

| Parameter | Min | Typ | Max | Units |
|-----------------------------|-----|--|-----|-------|
| Frequency Range | | 6 - 18 | | GHz |
| Insertion Loss | | 1.4 | 2.0 | dB |
| Isolation | 9 | 12 | | dB |
| VSWR | | 1.9 | 2.1 | :1 |
| Forward Power Handling (CW) | | | 1 | W |
| Rotation | | Clockwise (Standard) Counter Clockwise (upon request) | | |
| Input / Output Connectors | | SMA-Female | | |
| Impedance | | 50 | | Ω |

Environmental Specifications and Test Standards

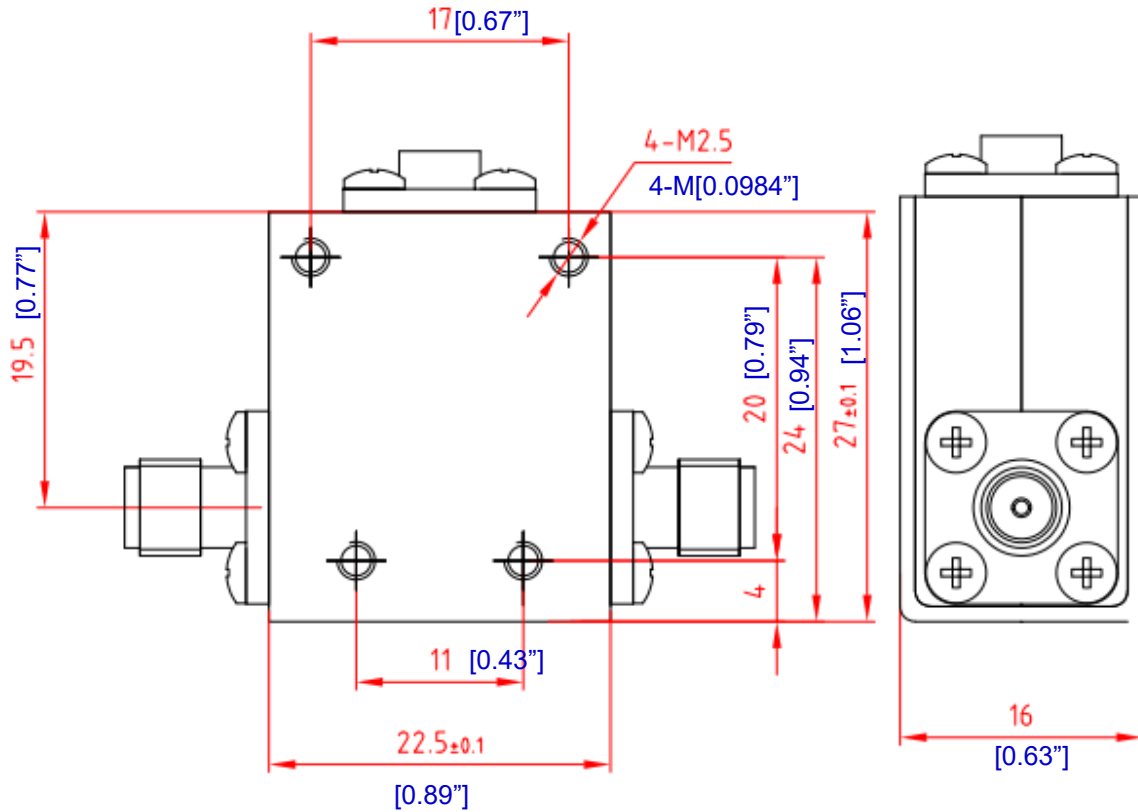
| Parameter | Description |
|-----------------------------------|---|
| Operational Temperature | -20°C~+70°C (Case Temperature) |
| Storage Temperature | -40°C to +85°C |
| Thermal Shock | -20°C~+70°C (5 Cycles / 10 hours) |
| **Random Vibration | MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis |
| High Temperature Burn In | Temperature +85°C for 72 Hours |
| 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



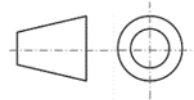
SN:211115

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy
2. Plating: Nickel
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 |
|---------------|--------------|---------------------|
| RFLI601G06G18 | Standard | 6GHz-18GHz Isolator |

Important Notice

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