# Ultra Wide Band Dual Junction Isolator 9.1GHz-9.6GHz

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

## Product Description

RFLI504G91G96 is an ultra wide band dual junction Isolator with a frequency range of 9.1 to 9.6GHz.

The Isolator has a minimum isolation of 35dB. The maximum insertion loss is 0.4dB.

The operating temperature of this product is from -20 to +70ºC

## Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

## 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 | | 9.1 – 9.6 | | GHz |
| Insertion Loss | | | 0.4 | dB |
| Isolation | 35 | | | dB |
| VSWR | | | 1.25 | :1 |
| Forward Power (CW) | | | 50 | W |
| Reverse Power (CW) | | | 5 | W |
| Rotation | | Clockwise (Standard)<br>Counter Clockwise (Upon Request) | | |
| Input / Output Connectors | | SMA-Female or N-Female | | |
| Weight | | - | | lbs. |
| Impedance | | 50 | | Ω |



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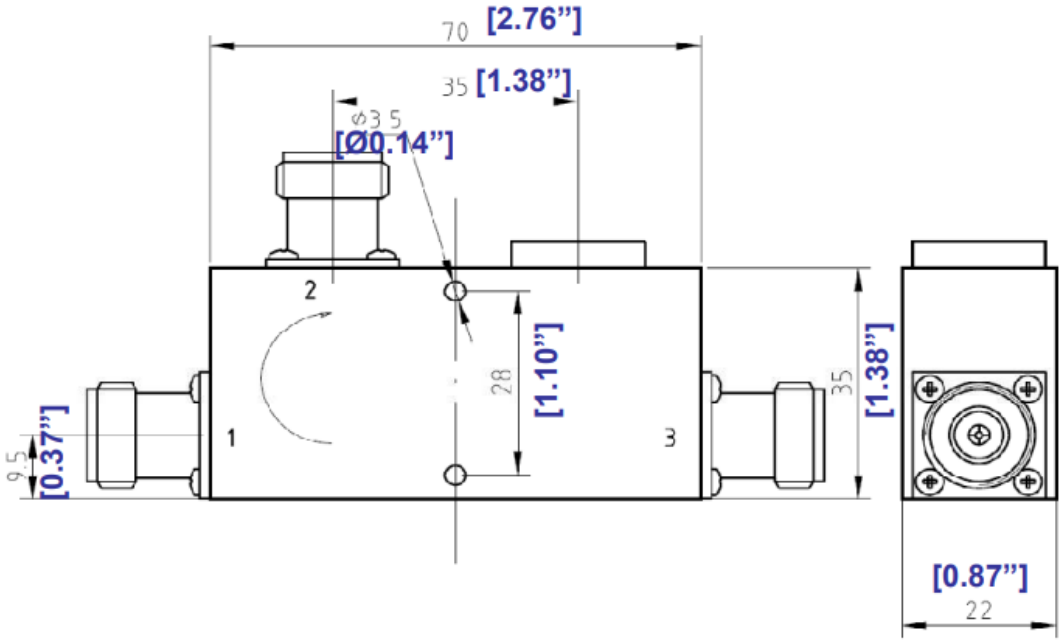
## Environmental Specifications and Test Standards

| Parameter | Description |
|---|---|
| Operational Temperature | -20ºC to +70ºC<br>(Case Temperature) |
| Storage Temperature | -40ºC to +85ºC |
| Thermal Shock | -20ºC → +70ºC<br>(5 Cycles / 10 hours) |
| **Random Vibration | MIL-STD-202G<br>Table 214-I, Test Condition Letter C<br>1.5 Hours Per Axis |
| Shock | 1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min) |
| Hermetically Sealed<br>(Optional) | MIL-STD-883 (For Hermetically Sealed Units) |

## Outline Drawing




Notes:
1. Package Material: Aluminum Alloy
2. Finish: Nickle Plated
3. All dimensions are in millimeters [inches]
4. Standard torque wrench must be used to secure RF connectors.

### 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 |
|---|---|---|
| RFLI504G91G96 | Connectors SMA–Female or N-Female | 9.1GHz-9.6GHz Coaxial Isolator |





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