

Ultra Wide Band Coaxial Isolator 0.95GHz-1.3GHz



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

Product Description

RFLI202M95G13 is an ultra wide band coaxial Isolator with a frequency range of 0.95 to 1.3GHz.

The Isolator has a typical isolation of 19dB. The maximum insertion loss is 0.4dB.

The operating temperature of this product is within -40 to +70°C

Features

- High power handling up to 200W
- 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

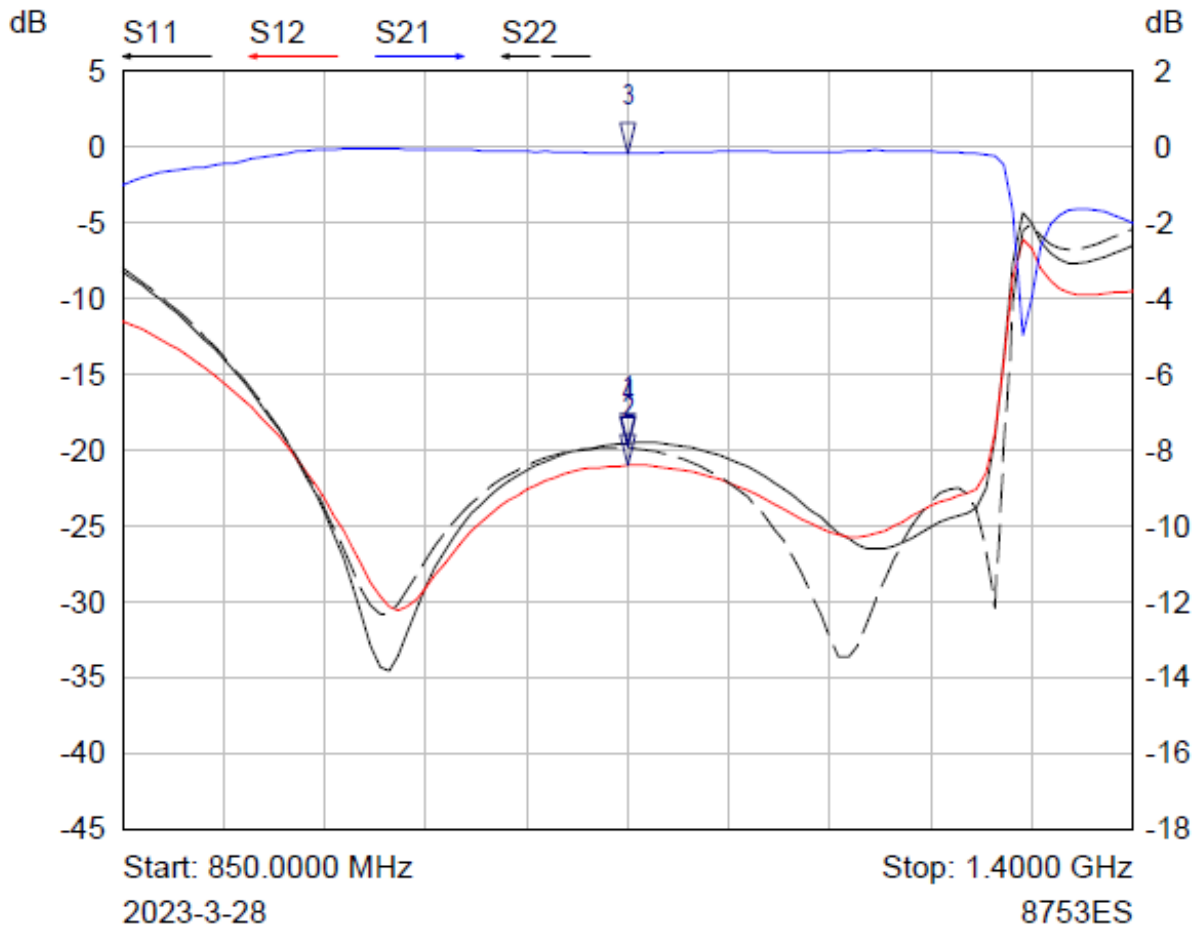
Electrical Specifications($T_A=25^\circ\text{C}$)

| Parameter | Min | Typ | Max | Units |
|---------------------------|------------|--|------|----------|
| Frequency Range | | 0.95 – 1.3 | | GHz |
| Insertion Loss | | | 0.40 | dB |
| Isolation (Note 1) | 19 | | | dB |
| VSWR | | | 1.29 | :1 |
| Forward Power (CW) | | | 200 | W |
| Reverse Power (CW) | | | 20 | W |
| Rotation | | Clockwise (Standard) Counter Clockwise (Upon Request) | | |
| Input / Output Connectors | | RFLI202M95G13S (SMA-Female) RFLI202M95G13N (N-Female) | | |
| Weight | SMA-Female | 0.375 | | lbs. |
| | N-Female | 0.45 | | |
| Impedance | | 50 | | Ω |

Environmental Specifications and Test Standards

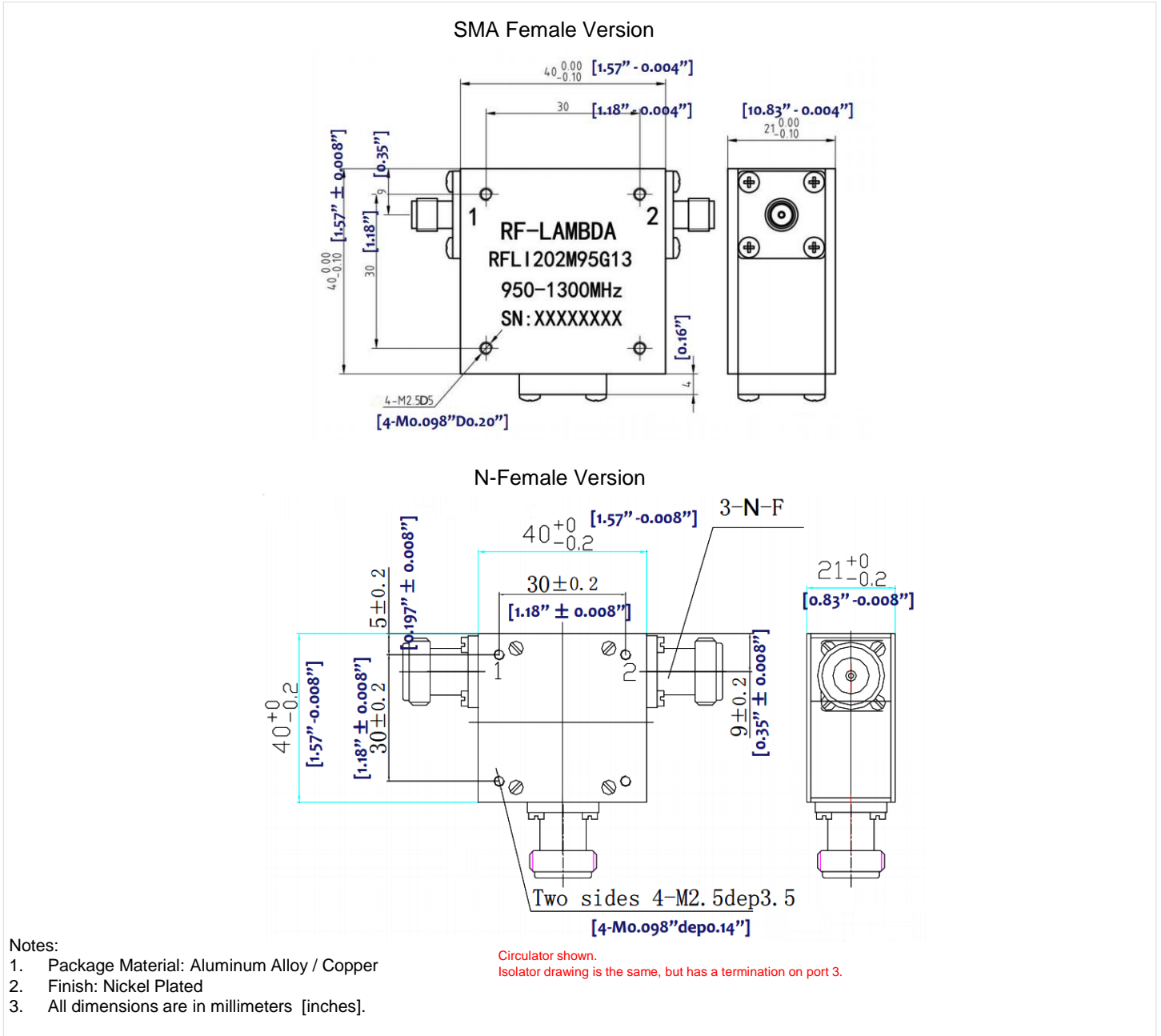
| Parameter | Description |
|-----------------------------------|---|
| Operational Temperature | -40°C to +70°C (Case Temperature) |
| Storage Temperature | -40°C to +85°C |
| Thermal Shock | -40°C → +85°C (5 Cycles / 10 hours) |
| **Random Vibration | MIL-STD-202G Table 214-I, Test Condition Letter 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) |

Typical Performance Plots



| Mkr | Trace | X-Axis | Value | Notes |
|-----|-------|------------|-----------|-------|
| 1 ▾ | S11 | 1.1250 GHz | -19.56 dB | |
| 2 ▾ | S12 | 1.1250 GHz | -21.03 dB | |
| 3 ▾ | S21 | 1.1250 GHz | -0.17 dB | |
| 4 ▾ | S22 | 1.1250 GHz | -19.84 dB | |

Outline Drawing



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 |
|----------------|-----------------------|---------------------------------|
| RFLI202M95G13S | SMA Female Connectors | 0.95GHz-1.3GHz Coaxial Isolator |
| RFLI202M95G13N | N Female Connectors | 0.95GHz-1.3GHz Coaxial Isolator |

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