

## Ultra Wide Band Coaxial Isolator 1.7 – 2.5GHz



### Product Description

RFLI316G17G25 is an ultra wide band coaxial isolator with a frequency range of 1.7 to 2.5GHz.

The Isolator has a typical isolation of 40dB. The maximum insertion loss is 1.0dB.

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

### Features

- High power handling up to 30W
- 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

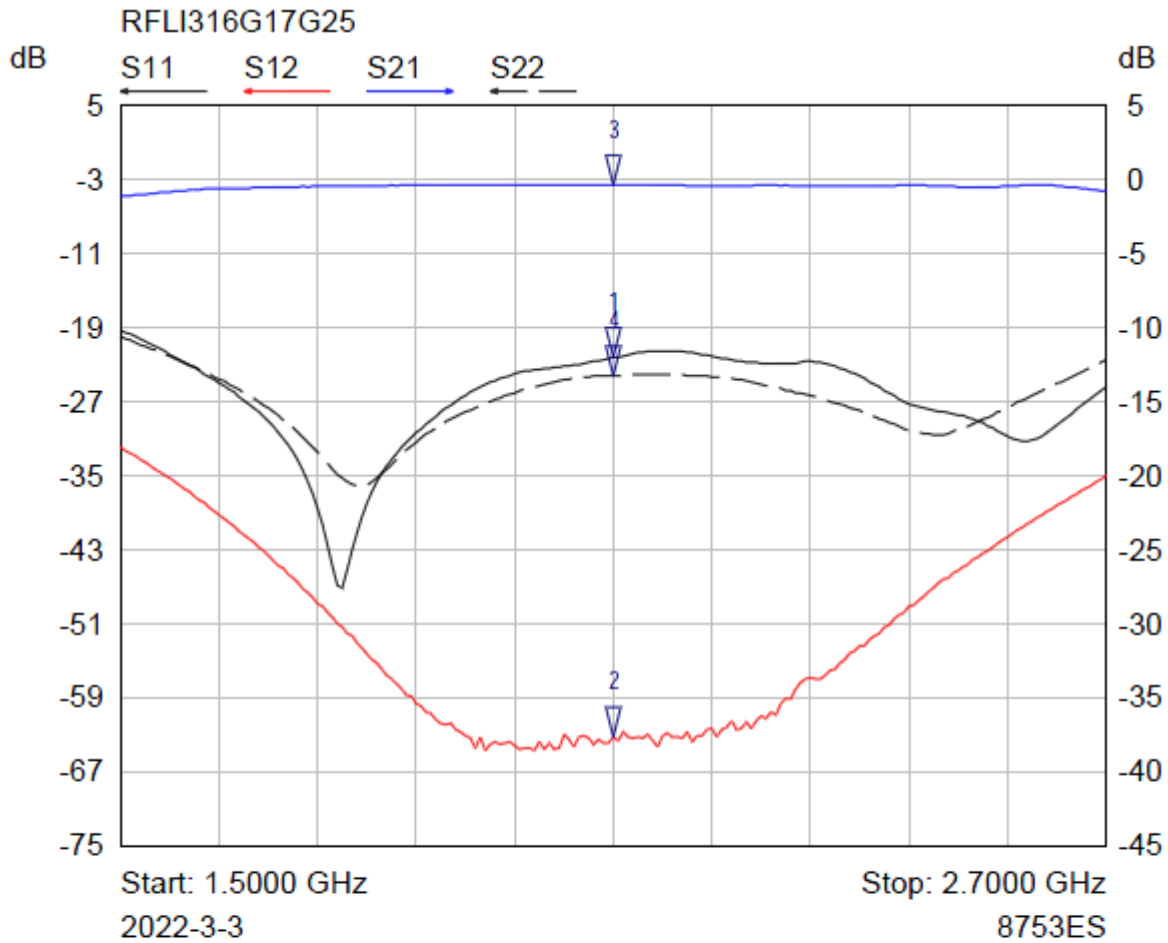
### Electrical Specifications(T<sub>A</sub>=25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		1.7 – 2.5		GHz
Insertion Loss			1	dB
Reverse Isolation	40			dB
VSWR			1.25	:1
Forward Power (CW)			30	W
Reverse Power (CW)			10	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Connectors		N-Female or SMA-Female		
Impedance		50		Ω

**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-20°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)

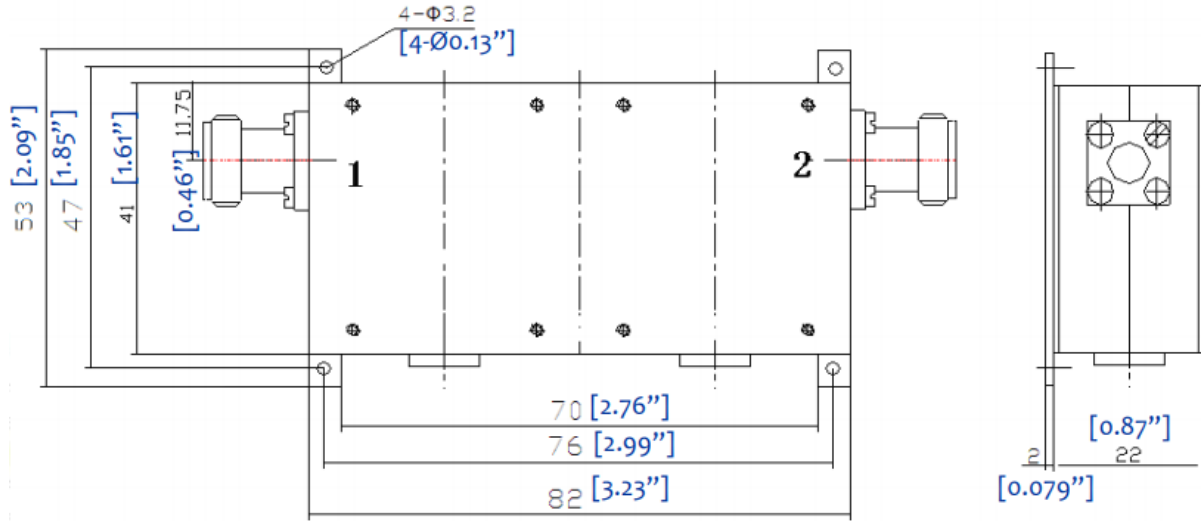
Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	2.1000 GHz	-22.25 dB	
2 ▾	S12	2.1000 GHz	-63.27 dB	
3 ▾	S21	2.1000 GHz	-0.34 dB	
4 ▾	S22	2.1000 GHz	-24.20 dB	

SN:220305

**Outline Drawing**



Notes:

1. Package Material: Aluminum Alloy
2. Plating: Nickel
3. All dimensions are in millimeters [inches].

Additional Information

Documentation	Webpage
ESD Policy	<a href="https://rflambda.com/pdf/rflambda_esd_control.pdf">https://rflambda.com/pdf/rflambda_esd_control.pdf</a>
Connector Torque Specifications	<a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>
Random Vibration Test Standard	<a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a>

**Ordering Information**

Part Number	Modification	Description
RFLI316G17G25N	N - Female Connectors	1.7GHz-2.5GHz Coaxial Isolator
RFLI316G17G25S	SMA - Female Connectors	1.7GHz-2.5GHz Coaxial Isolator

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