Ultra Wide Band Coaxial Isolator
1.7GHz - 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 +70ºC

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_A=25℃)

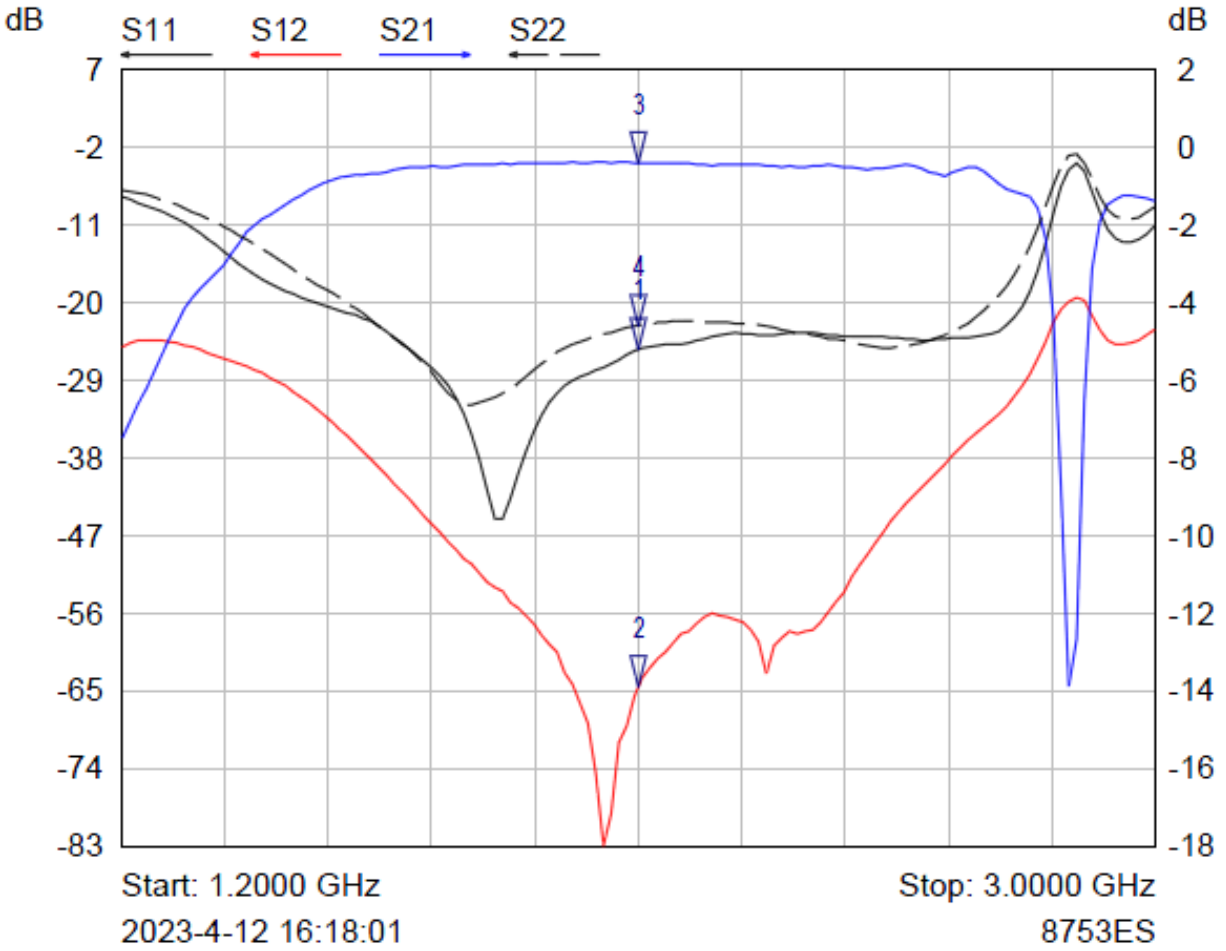
Parameter	Min	Typ	Max	Units
Frequency Range		1.7 – 2.5		GHz
Insertion Loss			1	dB
Reverse Isolation	40			dB
VSWR			1.25	:1
Forward Power (CW)			30	W
Reverse Power (CW)			10	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Connectors		RFLI316G17G25S – SMA-Female RFLI316G17G25N – N-Female		
Impedance		50		Ω

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20ºC to +70ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
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)

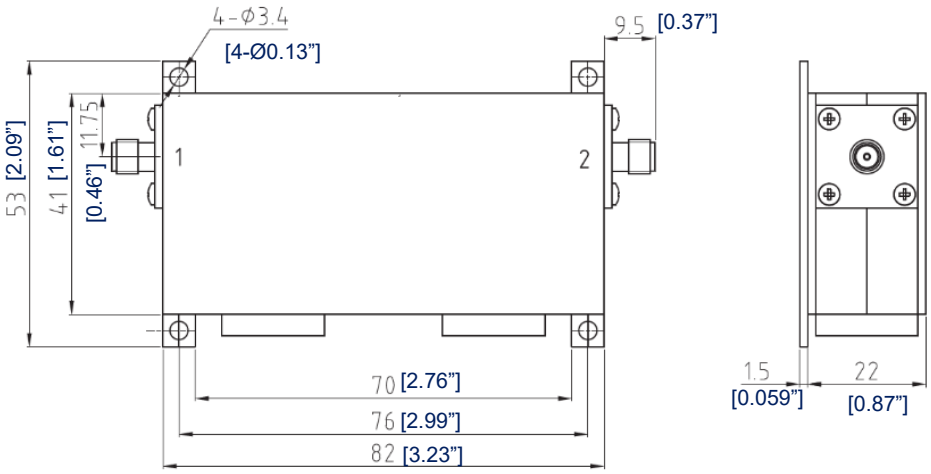
Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1	S11	2.1000 GHz	-25.44 dB	
2	S12	2.1000 GHz	-64.58 dB	
3	S21	2.1000 GHz	-0.40 dB	
4	S22	2.1000 GHz	-22.56 dB	

Outline Drawing

SMA Version Shown



Notes:
1. Package Material: Iron
2. Finish: Nickel 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
RFLI316G17G25S	Connectors SMA-Female	1.7GHz-2.5GHz Coaxial Isolator
RFLI316G17G25N	Connectors N-Female	1.7GHz-2.5GHz Coaxial Isolator

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