

Ultra Wide Band Coaxial Isolator 1.63GHz-2.63GHz



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

Features

- High power handling up to 100W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Product Description

RFLI301G16G26 is an ultra wide band coaxial Isolator with a frequency range of 1.63 to 2.63GHz.

The Isolator has a minimum isolation of 20dB. The maximum insertion loss is 0.4dB.

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

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	1.63		2.63	
Insertion Loss			0.4	dB
Isolation	20			dB
VSWR			1.25	:1
Forward Power (CW)			100	W
Reverse Power (CW)			10	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		SMA-Female or N-Female		
Impedance		50		Ω

Environmental Specifications and Test Standards

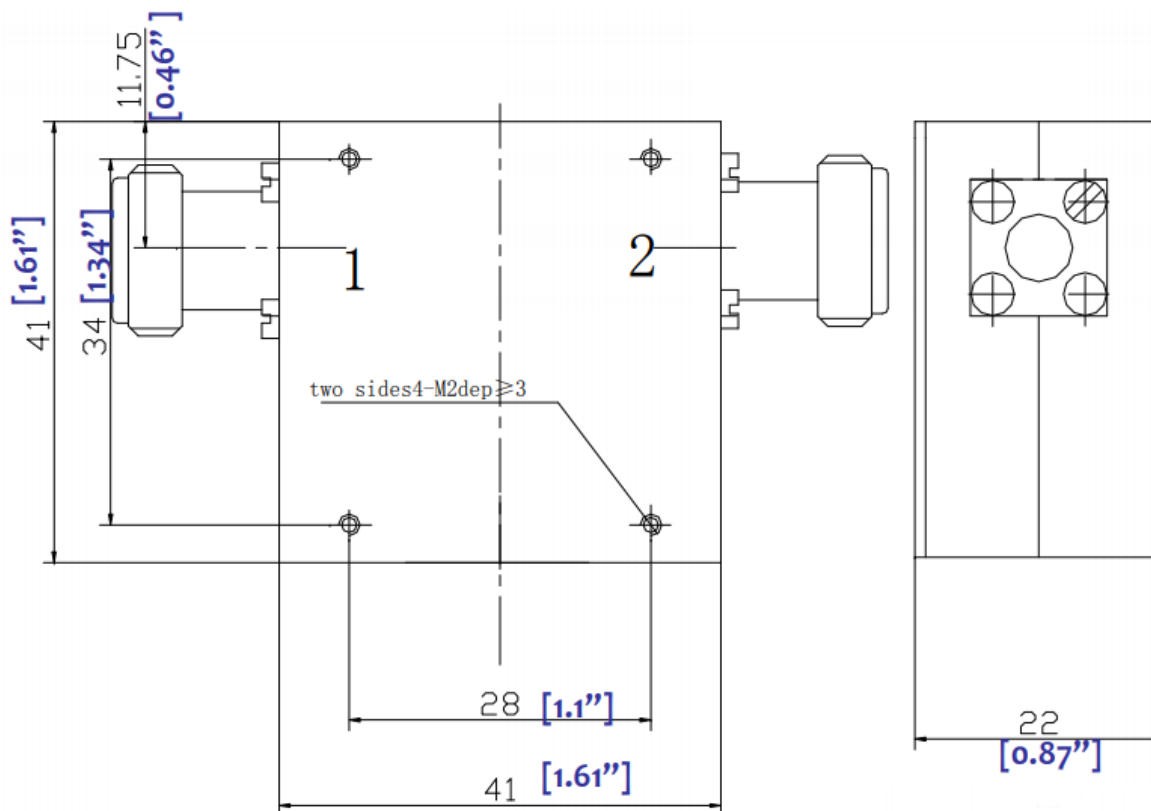
Parameter	Description
Operational Temperature	-20°C to +70°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-20°C → +70°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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	1.6321 GHz	S11	-25.79 dB	
2	1.6321 GHz	S12	-0.36 dB	
3	1.6321 GHz	S21	-34.02 dB	
4	1.6321 GHz	S22	-24.03 dB	
5	2.63 GHz	S11	-28.75 dB	
6	2.63 GHz	S12	-0.26 dB	
7	2.63 GHz	S21	-21.30 dB	
8	2.63 GHz	S22	-29.65 dB	

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy
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
RFLI301G16G26	SMA–Female or N-Female Connectors	1.63GHz-2.63GHz Coaxial Isolator

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