

WR19 Waveguide to Coaxial Adapter 40GHz-60GHz



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

Product Description

RFWA19V0COAL is a waveguide to coaxial adapter with a frequency range of 40 to 60GHz.

The max power handling of the adapter is 5W. The max VSWR of 1.5:1.

The working temperature of this product is between - 40°C ~ +85°C.

Features

- Full band operation
- Low VSWR
- Rugged mechanical configuration

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°C)

Parameter	Min	Typ	Max	Units
Frequency Range	40		60	GHz
Insertion loss		0.3	0.6	dB
VSWR		1.3	1.5	: 1
Power handling(CW)		5		W
Weight		-		lbs.
Waveguide		WR19		
Flange Type		UG383/U		
Connector		WR19 / 1.85mm-Female		
Package		Gold plated		

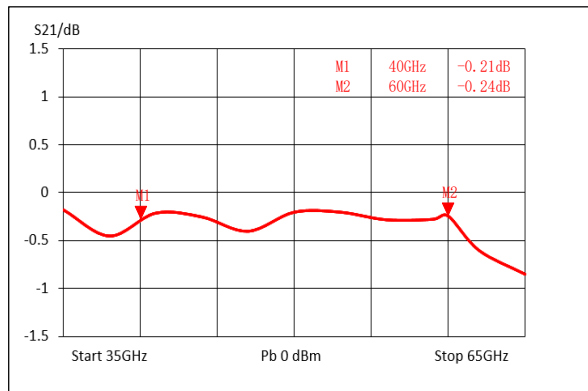
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°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
High Temperature Burn In	Temperature +85°C for 72 Hours
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)

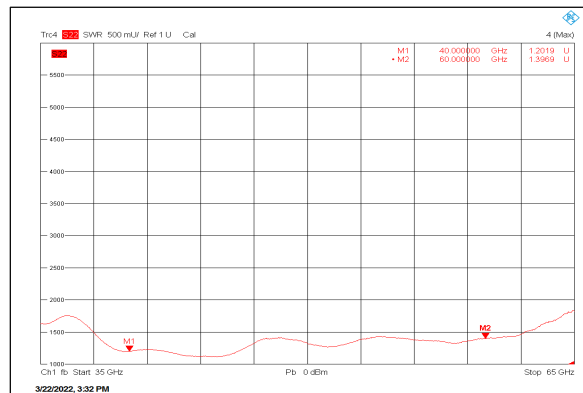
**For vibration testing details please see additional information section.

Typical Performance Plots

Insertion Loss

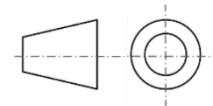
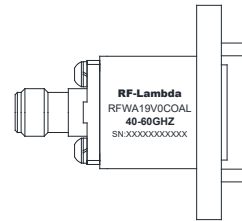
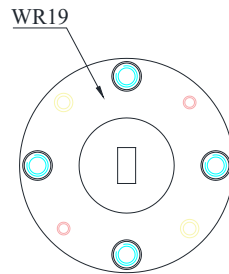
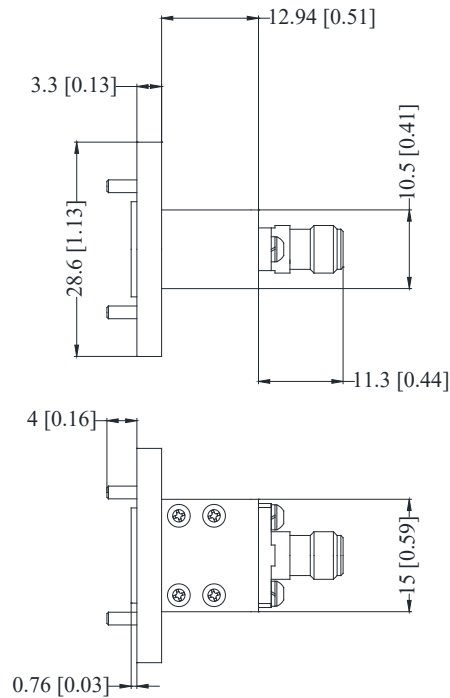
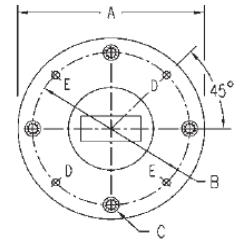


VSWR



Outline Drawing

WR19	WG24	R500
UG383/U		
Dimensions	inches	mm
A	1.13	28.85
C Holes	4-40 UNC-2B	
D Holes	0.063	1.613
E Dowels	0.061	1.555
All Holes	0.938	23.81



Notes:

1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Tolerances ± 0.1 [0.004] unless otherwise specified.



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
RFWA19V0COAL	WR19/1.85mm-Female	40GHz-60GHz Waveguide to Coaxial Adapter

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