

Double Ridge Waveguide to Coaxial Adapter 18GHz-40GHz



Product Description

RFWAD180E0COBS is a double ridge waveguide to coaxial adapter with a frequency range of 18 to 40GHz.

The max power handling of the adapter is 50W. The max VSWR of 1.6:1.

The working temperature of this product is between - 40°C and + 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	18		40	GHz
Insertion loss			0.5	dB
VSWR			1.6	: 1
Power handling(CW)			50	W
Weight		0.07 Typ		lbs.
Waveguide		WRD180C24		
Flange Type		WRD180		
Connector		2.92mm-Female		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

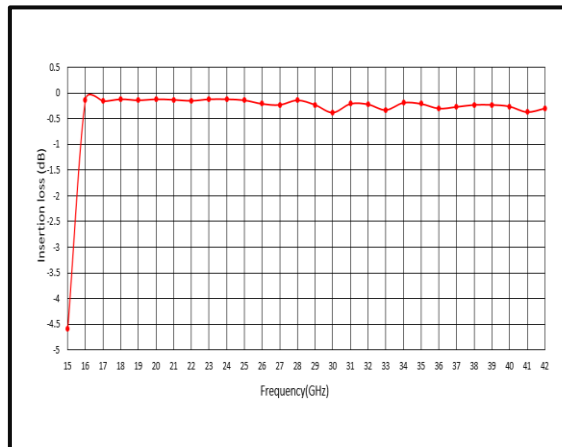
Environmental Specifications and Test Standards

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)

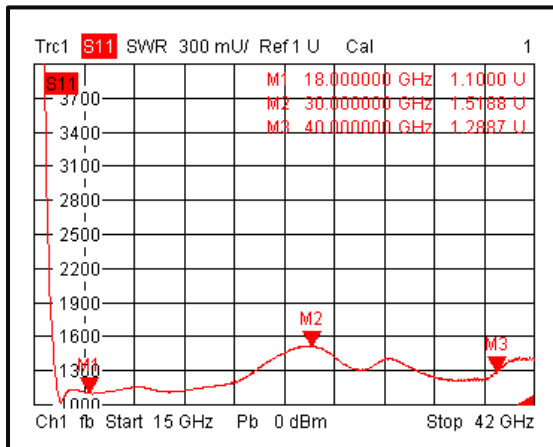
**For vibration testing details please see additional information section.

Typical Performance Plots

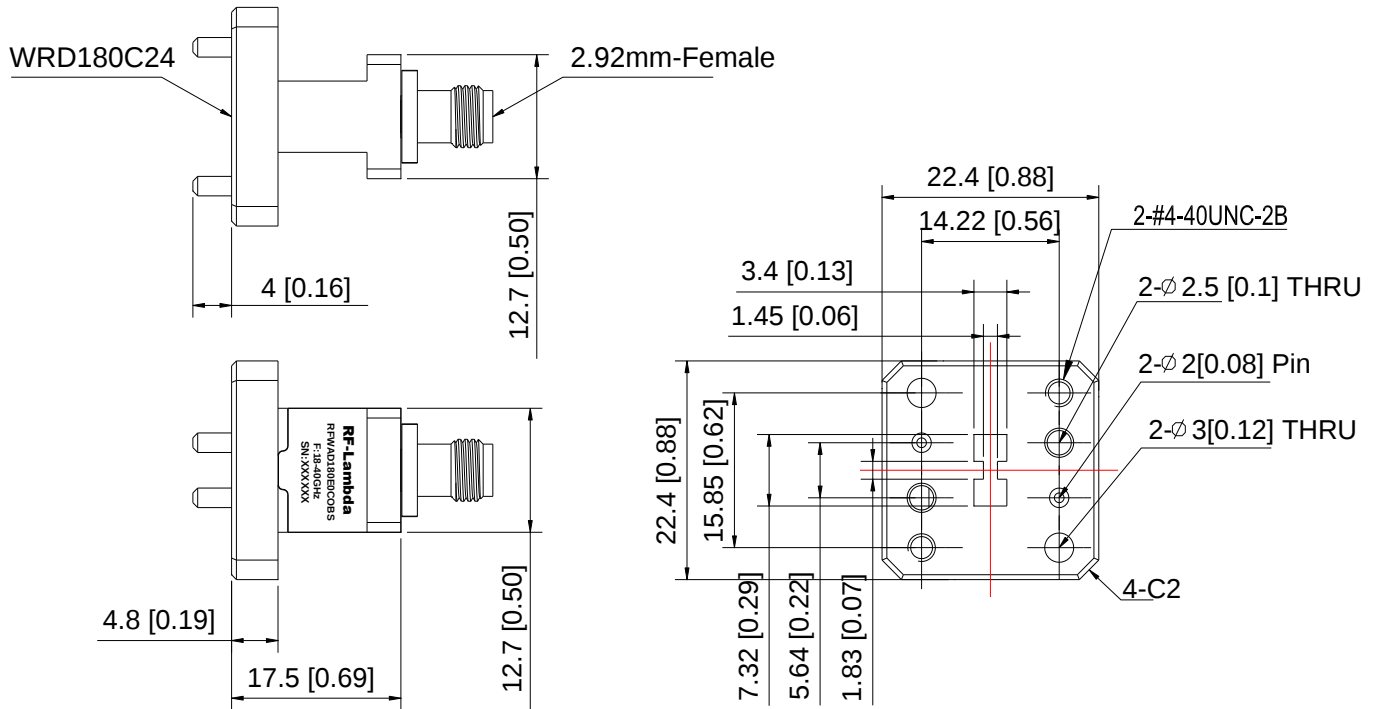
Insertion loss



Input VSWR

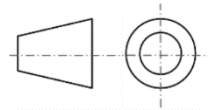


Outline Drawing



Notes:

1. Package Material: Copper/Brass
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Tolerances ± 0.2 [0.008] 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
RFWAD180E0COBS	Connector 2.92mm-Female	18GHz-40GHz Double Ridge Waveguide to Coaxial Adapter

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