

WR187 Waveguide Rotary Joint 5GHz-5.1GHz



Note: The photo is for illustration purposes only.
Please refer to the outline drawing.

Features

- Waveguide Rotary Joint
- High power up to 600W

Product Description

RFWRJ187SI-5G5.1G is a WR187 waveguide rotary joint with a frequency range of 5 to 5.1GHz.

The average power handling of the attenuator is 600W.

The waveguide type is WR187.

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 ($T_A=+25^{\circ}\text{C}$)

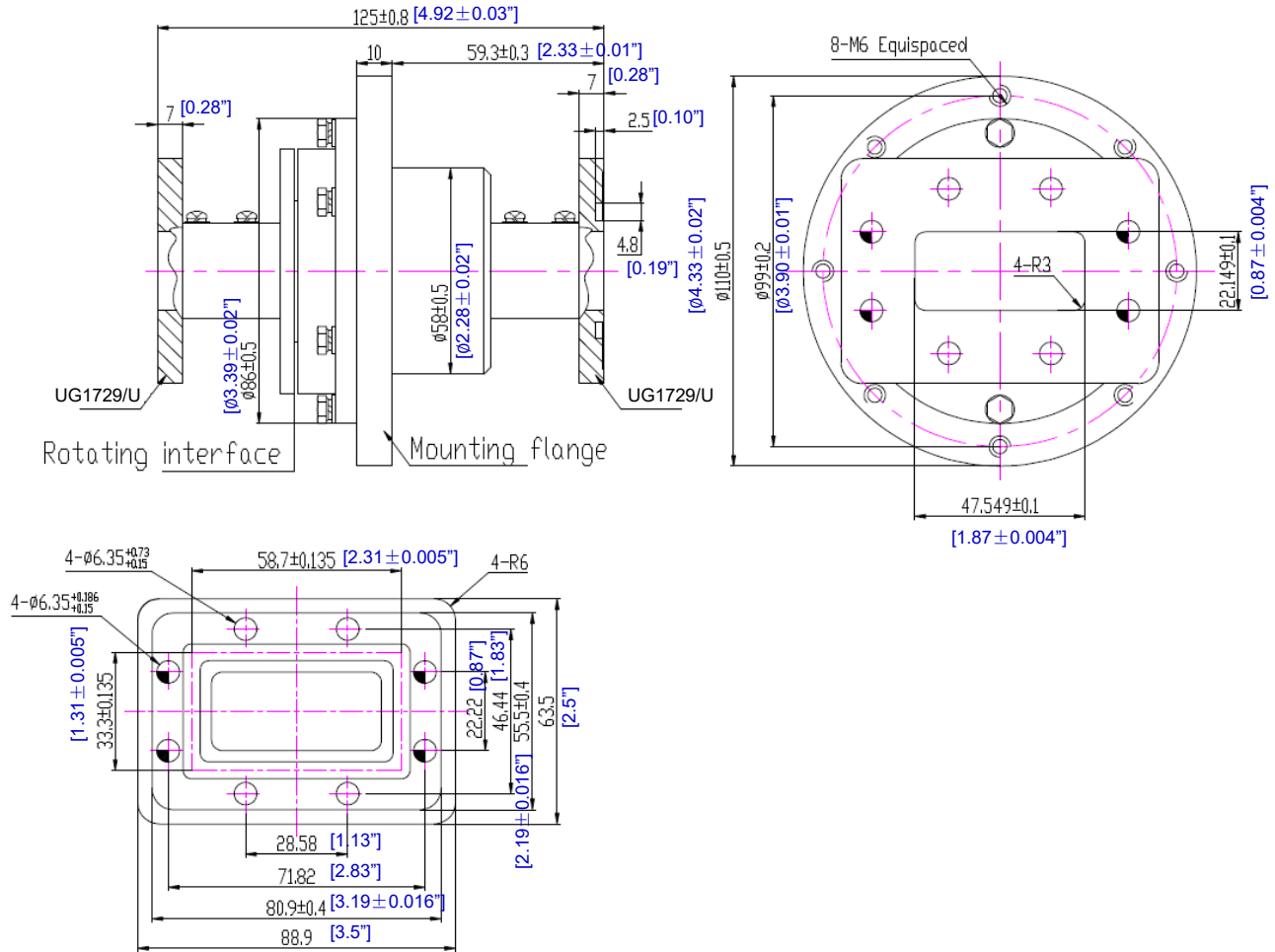
Parameter		Min	Typ	Max	Units
Frequency Range			5-5.1		GHz
VSWR				1.2	: 1
VSWR WOW				0.05	: 1
Insertion loss				0.15	dB
Power Handling (CW)	Average		600		W
	Peak		6		KW
Waveguide type			WR187		
Flange Type			UG1729/U		

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +70°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +70°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 +70°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)

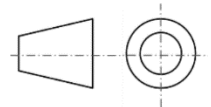
*For vibration testing details please see additional information section.

Outline Drawing



Notes:

1. Material: Aluminum
2. Inside finish: Silver plated; Outside finish: Anticorrosion grey paint
3. All dimensions are in millimeters [inches].



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
RFWRJ187SI-5G5.1G	WR187	5GHz-5.1GHz Waveguide Rotary Joint

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