

WR51 Waveguide 1000W High Power Termination 14.5GHz-22GHz



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

Features

- Full band operation
- Low VSWR

Product Description

RFWT51F is a high power waveguide termination with a frequency range of 14.5 to 22GHz.

The handling power of this termination is 1000W.

The working temperature of this product is between - 40°C and + 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, TA = +25°C

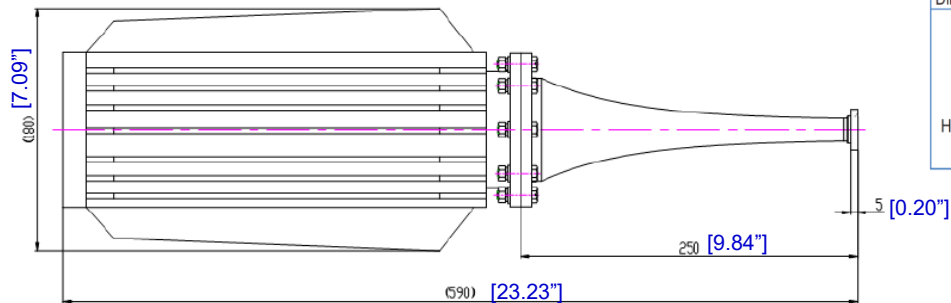
Parameter	Min	Typ	Max	Units
Frequency Range	14.5		22	GHz
VSWR			1.25	: 1
Power Handling (CW)			1000	W
Waveguide Type		WR51		
Flange		UG Cover		

Environmental Specifications and Test Standards

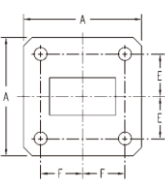
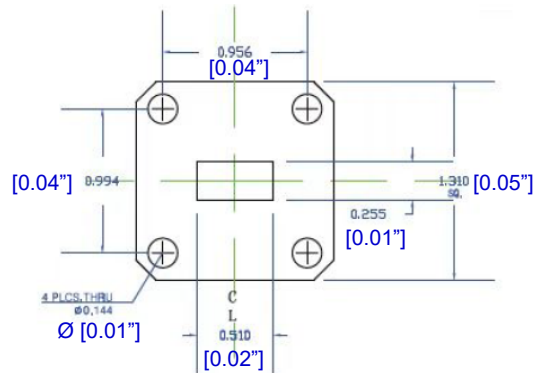
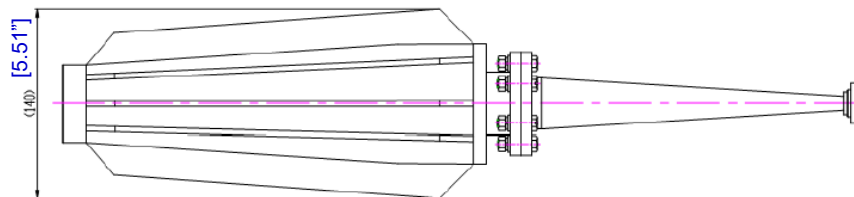
Parameter	Description
Operational Temperature	-40°C to +70°C (Case Temperature)
Storage Temperature	-50°C to +125°C
Thermal Shock	-40°C → +70°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for 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.

Outline Drawing

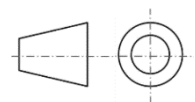


WR51	WG19	R180
COM'L		
Dimensions	inches	mm
A	1.31 ¹	33.27
E	0.497 ¹	12.62
F	0.478 ¹	12.14
Hole Dia.	0.144 ²	3.658

Notes:

1. Basis-material: Aluminum
2. Finish: Inside finish: Chromate conversion; Outside finish: Corrosion protected with grey paint
3. All dimensions are in millimeters [inches].



Additional Information

Documentation

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

Webpage

Ordering Information

Part Number	Modification	Description
RFWT51F	WR51	14.5GHz-22GHz High Power Termination

Important Notice

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