



## WR51 Waveguide Attenuator 15 – 22GHz



Please refer to the mechanical drawing for dimensions.  
Picture is only or illustration purpose only.

### Features

- Waveguide Attenuator.
- 50W Power Handling.

### Typical Applications

- Microwave Test and Measurement
- Radar Applications.
- Military and Defense.

### Electrical Specifications , $T_A=25\text{ }^\circ\text{C}$

Parameters	Min.	Typ.	Max.	Units
Frequency Range	15		22	GHz
VSWR			1.2	:1
Attenuation	3 – 40dB Attenuation Available Upon Request			dB
Forward Power (CW)			50	W
Peak Power (8us pulse)			1	KW
Waveguide Type	Rectangular Waveguide WR51			
Flange type	CPRG, CPRF, COVER, CHOKE, COM'L			
Flange Holes	Through			
Internal Body Finish	Silver Plated chromate or conversion			
External Body Finish	Painted			

**WR51 Waveguide Attenuator 15 – 22GHz**



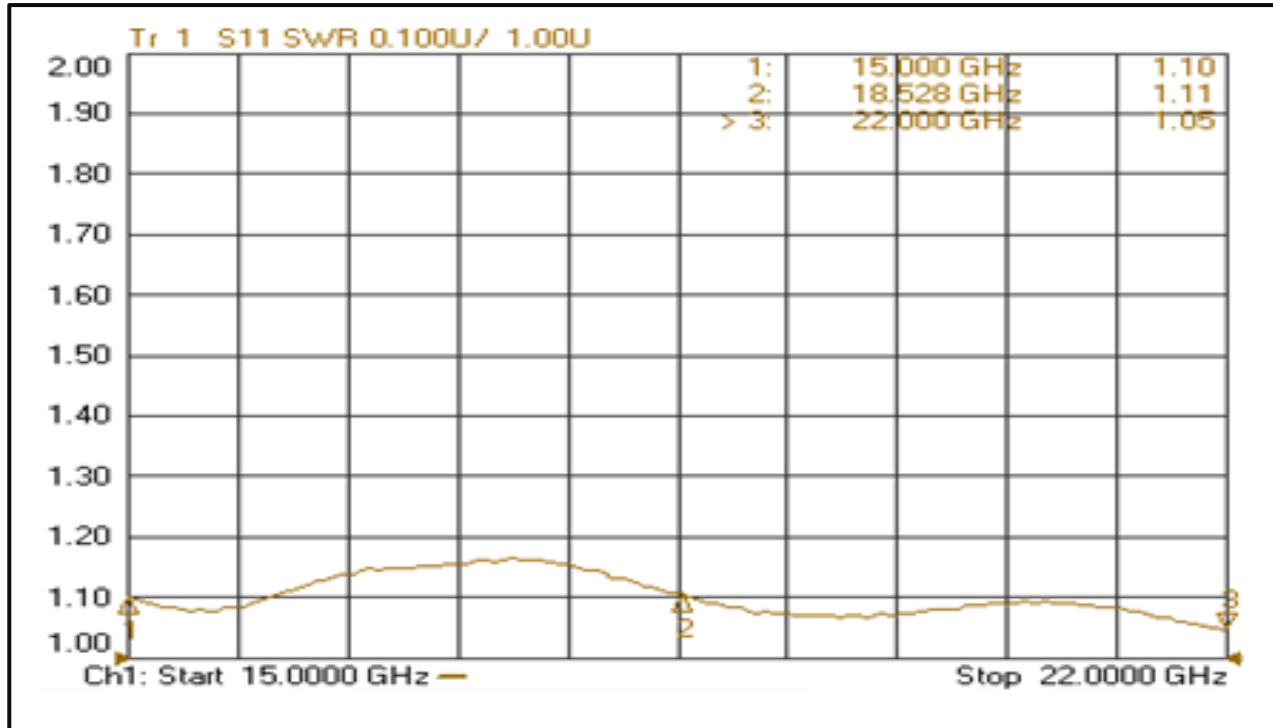
*Environmental Specifications and Test Standards*

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+85°C
Storage Temperature		-60°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & 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

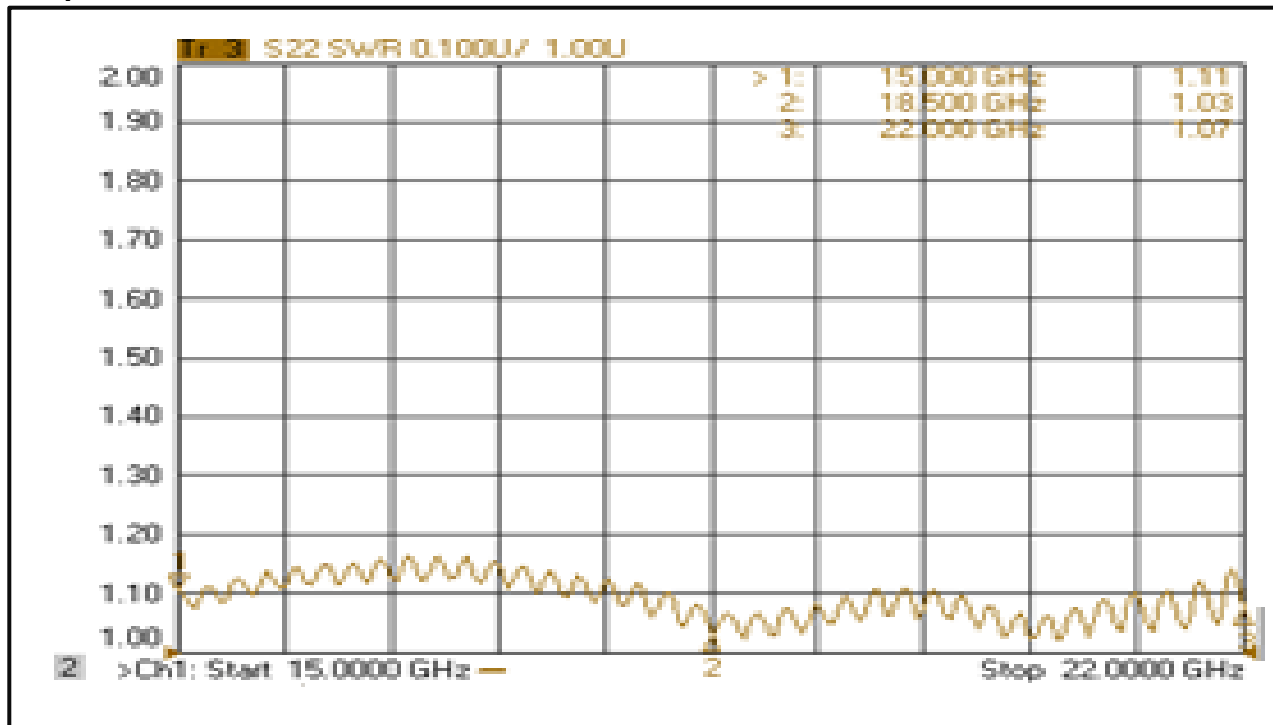


### Typical Performance Plots

#### Input VSWR



#### Output VSWR

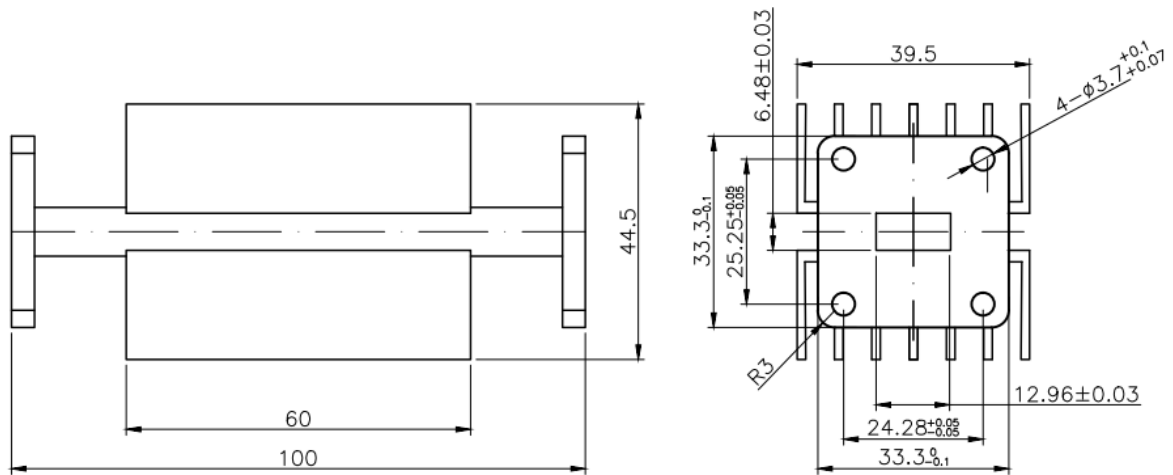




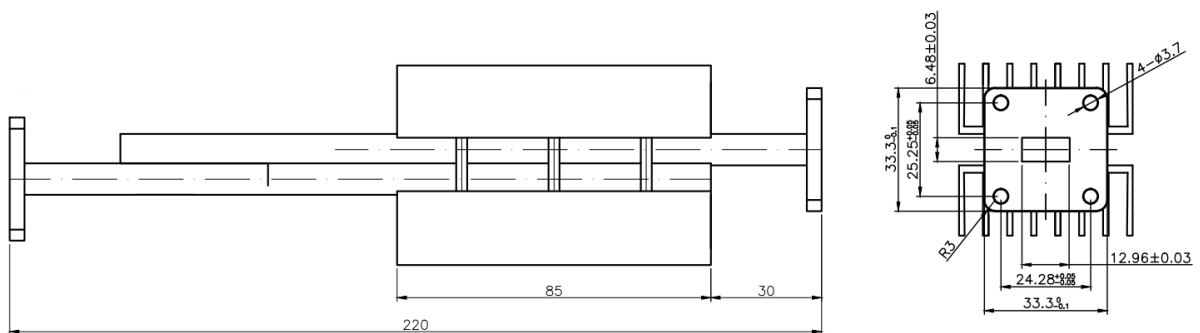
**Outline Drawing:**

All Dimensions in mm

20dB Model



40dB Model



Note: Other attenuation values may have a different mechanical outline.

**Important Notice**

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