



### Waveguide WR42 Fixed Attenuator 17.6-21.36GHz



*\* Note photo may not be an exact representation of the part.  
Please refer to the drawing.*



#### Features

- WR42 Fixed Waveguide Attenuator
- Low VSWR

#### Typical Applications

- Microwave Signal Attenuation.
- Test and Measurement.
- Research and Development.
- Radar Applications

#### Electrical Specifications, 25°C

Parameter	Min	Typ	Max	Units
Frequency Range	17.36		21.36	GHz
Attenuation	14	15	16	dB
	Attenuation Range 3-40dB upon request			
VSWR			1.25	: 1
Power Handling (CW)			15	W

#### Mechanical Specifications

Waveguide Type	Rectangular Waveguide WR42
Flange Type	Choke
Flange Holes	Input (Clearance), Output (Tapped)
Internal Body Finish	Silver Plated
External Body Finish	Silver Plated

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### Environmental Specifications

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+105°C
Storage Temperature		-55°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	MIL-STD-883 (For Hermetically Sealed Units)
TML *	ASTM	< 1%
CVCM *	ATSM	< 0.1%

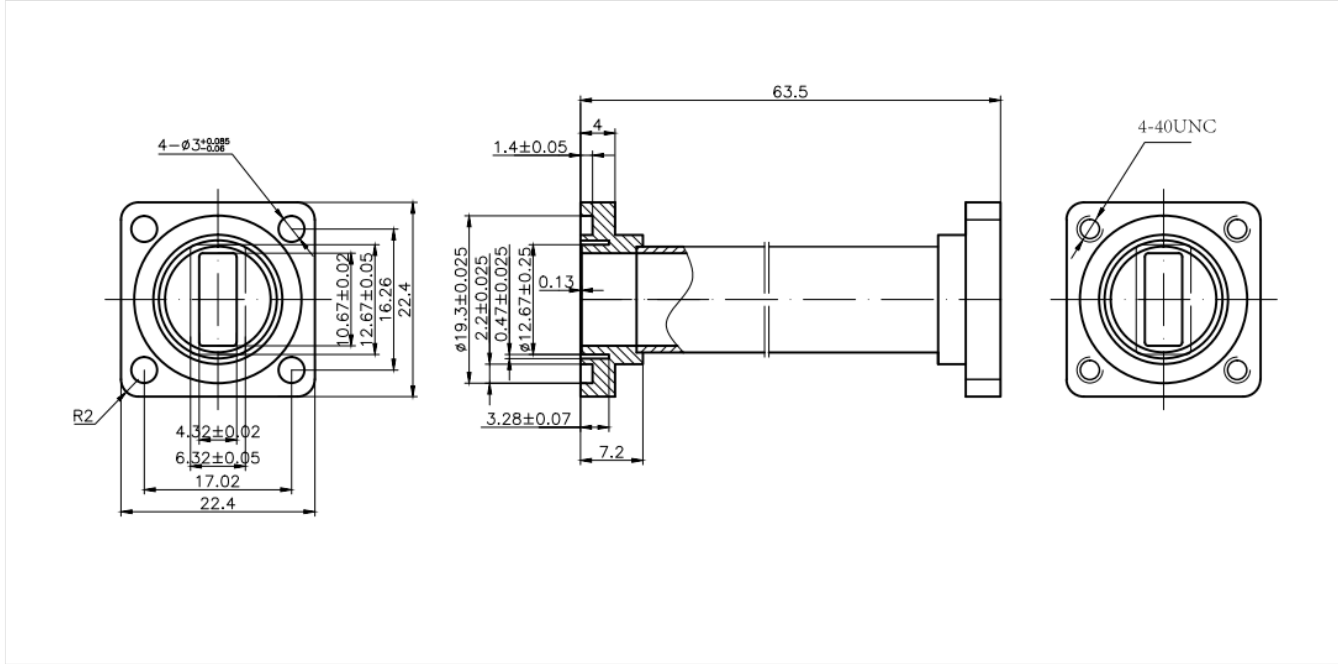
\* Compliance with outgassing is the responsibility of the user, RF-Lambda will provide data sheets on at risk materials and small material samples for testing as required.

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### Outline Drawing:

All Dimensions in mm



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### Important Notice

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