

# Waveguide WR28 Attenuator 26.5GHz–40GHz



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

## Product Description

RFWAT28W020 is a waveguide WR28 fixed attenuator with a frequency range of 26.5 to 40GHz.

The attenuator's maximum average power is 20W. The attenuation value can be from 3 to 30dB.

The waveguide type is WR28.

## Features

- Waveguide Attenuator
- 20W Power Handling
- Low VSWR

## 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<sub>A</sub>=+25°C)

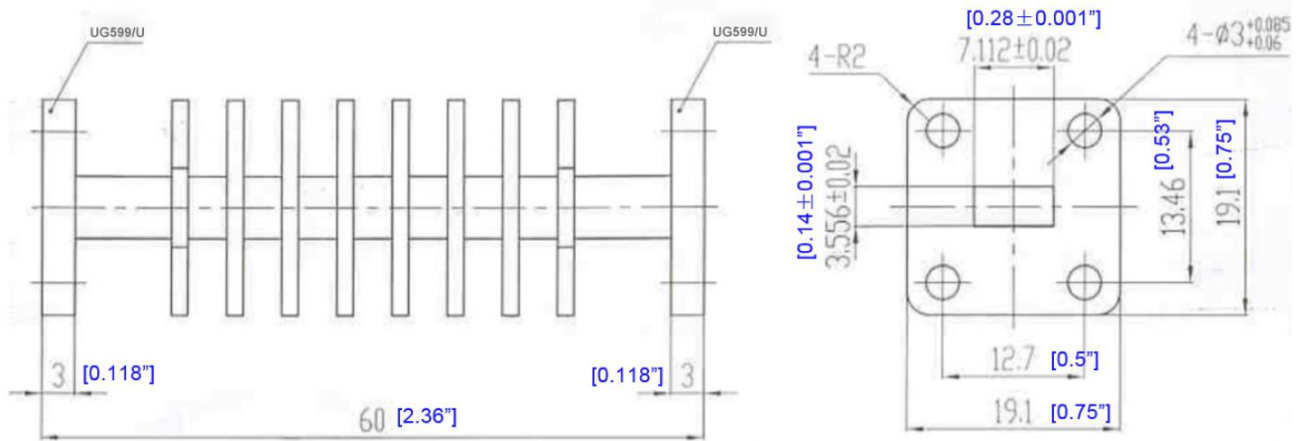
| Parameter          | Min | Typ             | Max  | Units |
|--------------------|-----|-----------------|------|-------|
| Frequency Range    |     | 26.5-40         |      | GHz   |
| VSWR               |     |                 | 1.25 | : 1   |
| Attenuation        |     | 3-30            |      | dB    |
| Accuracy           |     | ±1              |      | dB    |
| Average Power (CW) |     |                 | 20   | W     |
| Waveguide Type     |     | WR28            |      |       |
| Flange Type        |     | UG599/U (Cover) |      |       |

## Environmental Specifications and Test Standards

| Parameter                         | Description                                                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational Temperature           | -40°C to +70°C<br>(Case Temperature)                                                                                                                                                                            |
| Storage Temperature               | -50°C to +105°C                                                                                                                                                                                                 |
| Thermal Shock                     | -40°C → +70°C<br>(5 Cycles / 10 hours)                                                                                                                                                                          |
| *Random Vibration                 | MIL-STD-202G<br>Table 214-I, Test Condition Letter C<br>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<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude                          | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)                                                                                             |
| Hermetically Sealed<br>(Optional) | MIL-STD-883 (For Hermetically Sealed Units)                                                                                                                                                                     |

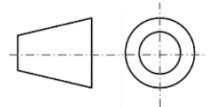
\*For vibration testing details please see additional information section.

**Outline Drawing**



**Notes:**

1. Material: Copper
2. Inside finish: Silver plating; Outside finish: Corrosion protected with grey paint
3. All dimensions are in millimeters [inches].
4. Tolerances  $\pm 0.25$  [0.01] unless otherwise specified.



**Additional Information**

**Documentation**

ESD Policy

[https://rflambda.com/pdf/rflambda\\_esd\\_control.pdf](https://rflambda.com/pdf/rflambda_esd_control.pdf)

Connector Torque Specifications

[https://www.rflambda.com/pdf/Torque\\_Specifications.pdf](https://www.rflambda.com/pdf/Torque_Specifications.pdf)

Random Vibration Test Standard

[https://www.rflambda.com/pdf/rflambda\\_random\\_vibration\\_MIL-STD-202G.pdf](https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf)

**Webpage**

Ordering Information

| Part Number | Modification | Description                        |
|-------------|--------------|------------------------------------|
| RFWAT28W020 | WR28         | 26.5GHz-40GHz Waveguide Attenuator |

Important Notice

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