

80W Continuously Variable Attenuator 0.9GHz-4GHz



Product Description

RKT80G4A20 is a manual control 80W continuously variable attenuator with a frequency range of 0.9 to 4GHz. The frequency can be tuned to 100MHz or 200MHz bandwidth within these limits.

The max average power of this attenuator is 80W. The attenuation range is 20dB.

The working temperature of this product is between - 10°C and + 50°C.

Features

- Manual Control Continuous Variable Attenuators
- Excellent Repeatability and Long Life Switch.
- Low Deviation from Nominal Value.
- Continuous variable attenuation during operation.
- Higher power is available upon request.
- Custom Configurations Available Upon Request.

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°C)

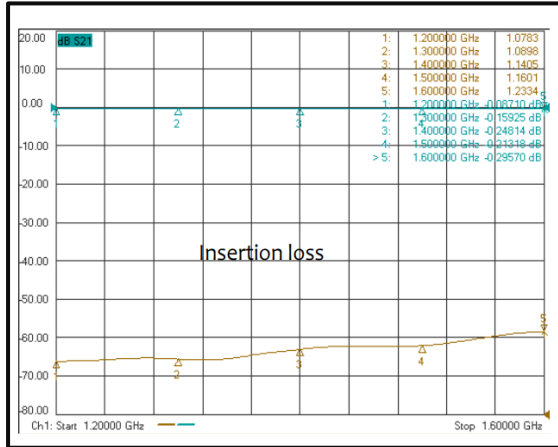
| Parameters | Min. | Typ. | Max. | Units |
|---------------------------------------|------|--------|------|-------|
| Frequency Range (BW 100MHz or 200MHz) | 0.9 | | 4 | GHz |
| Attenuation Range | | 20 | | dB |
| Attenuation Accuracy | | ±1.0 | | dB |
| Flatness | | 0.15 | | dB |
| VSWR | | | 1.5 | :1 |
| Insertion Loss | | | 0.5 | dB |
| Power Handling | | 80 | | Watts |
| Impedance | | 50 | | Ohms |
| Weight | | 4.41 | | lbs |
| Connectors | | N-Type | | |

Environmental Specifications and Test Standards

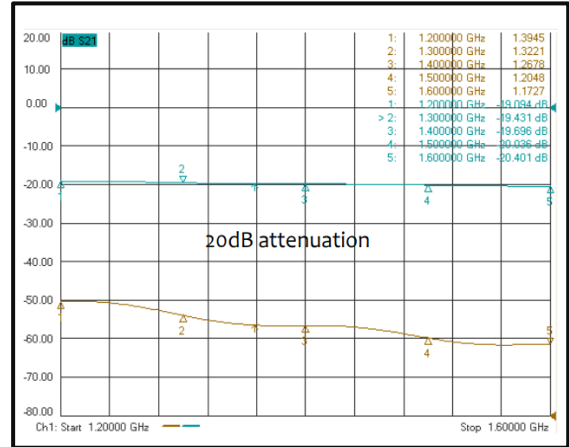
| Parameter | Description |
|-----------------------------------|---|
| Operational Temperature | -10°C to +50°C (Case Temperature) |
| Storage Temperature | -40°C to +70°C |
| Thermal Shock | -40°C → +85°C (5 Cycles / 10 hours) |
| **Random Vibration | MIL-STD-202G Table 214-I, Test Condition Letter 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) |

Typical Performance Plots

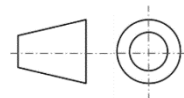
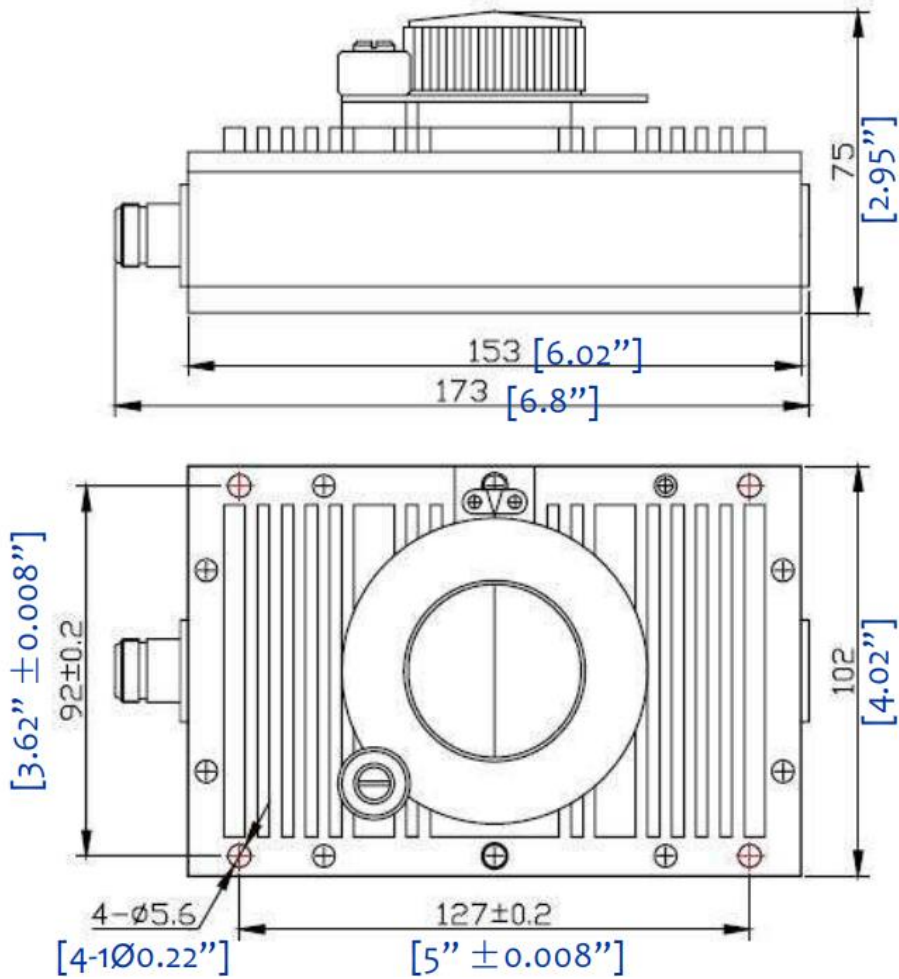
Insertion Loss (1.2 to 1.4GHz Shown)



Attenuation 20dB (1.2 to 1.4GHz Shown)



Outline Drawing



Notes:

1. 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 |
|-------------|-------------------|--|
| RKT80G4A20 | Connectors N-Type | 0.9-4GHz Continuously Variable Attenuators |

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