

Manual Control Step Attenuator DC–2.5GHz



Product Description

RKT2G3A40 is a manual control step attenuator with a frequency range of DC to 2.5GHz.

The attenuator's average power is 2W CW. The attenuation range is 40dB with an attenuation step size of 1dB. The maximum insertion loss is 3.0dB with a VSWR of 1.4:1.

The connectors are SMA-Type or N-Type.

Features

- Very compact package and broadband performance
- Excellent Repeatability
- 50Ω impedance standard

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)

| Parameter | Min. | Typ. | Max. | Units |
|-----------------------|--------|----------|------|-------|
| Frequency Range | | DC – 2.5 | | GHz |
| Attenuation Step Size | | 1 | | dB |
| Attenuation Range | | 40 | | dB |
| VSWR | | | 1.4 | :1 |
| Insertion Loss | | | 3.0 | dB |
| Attenuation Accuracy | single | ±0.4 | | dB |
| | 16dB | ±0.75 | | dB |
| Average Power | | | 2 | W |
| Weight | | 0.47 | | lbs. |
| Impedance | | 50 | | Ω |
| Connectors | | SMA or N | | |

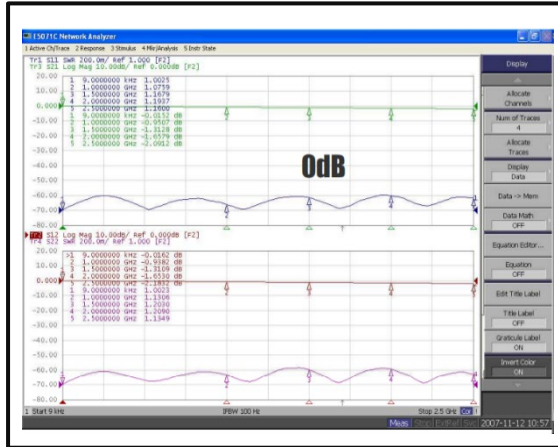
Environmental Specifications and Test Standards

| Parameter | Description |
|-----------------------------------|---|
| Operational Temperature | -10°C to +50°C (Case Temperature) |
| Storage Temperature | -40°C to +70°C |
| Thermal Shock | -10°C → +50°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.

Typical Performance Plots

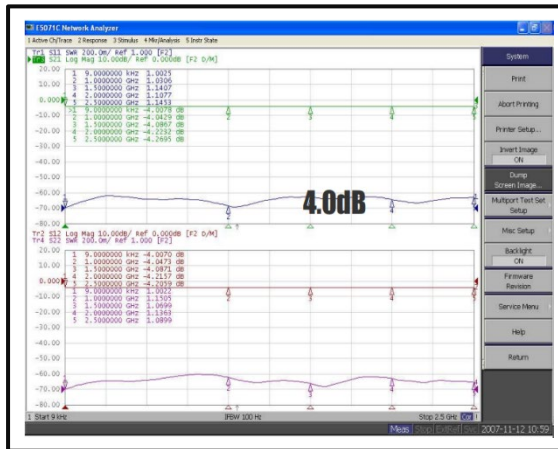
0dB



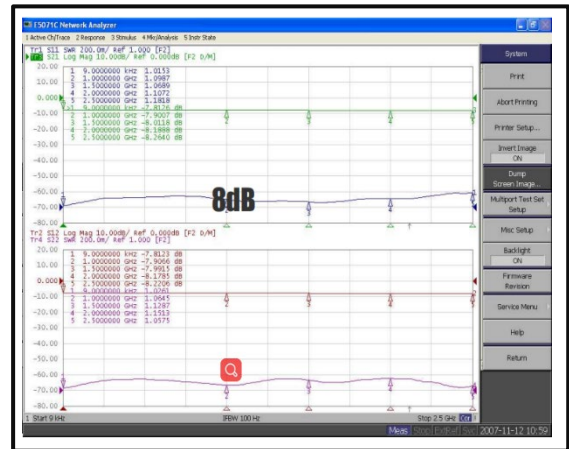
1.0dB



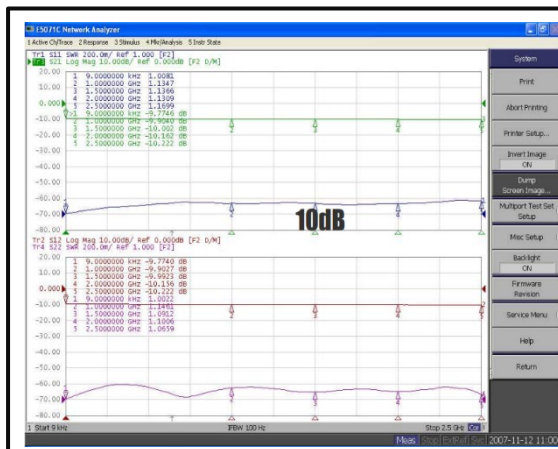
4.0dB



8.0dB



10dB



16dB

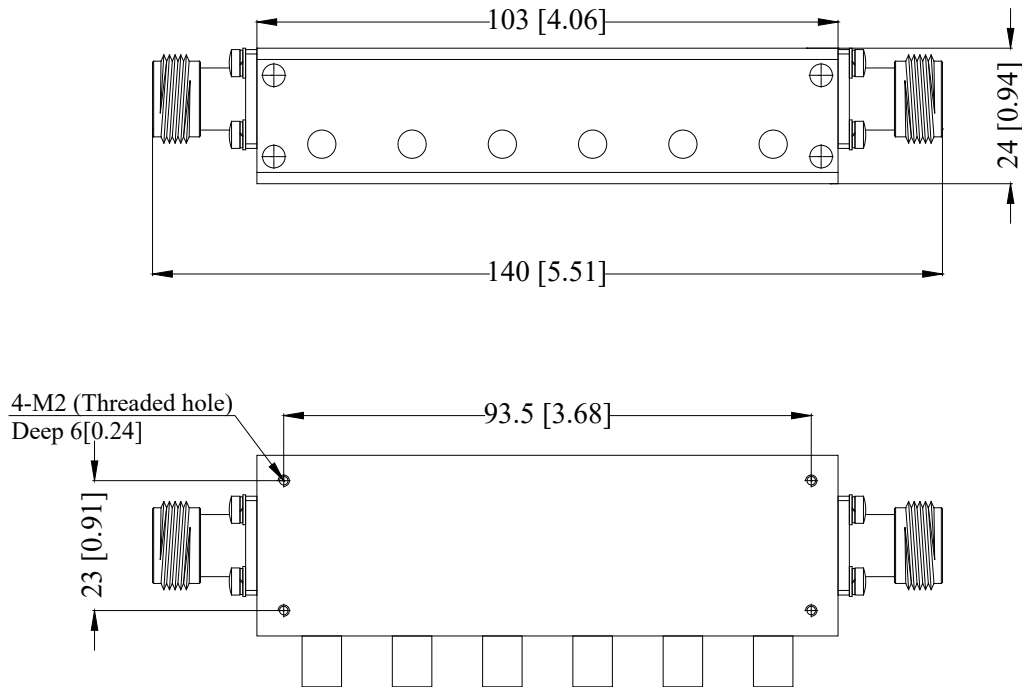


Typical Performance Plots

40dB



Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish : Painted
3. 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 |
|-------------|--------------------------------|--|
| RKT2G3A40 | connector SMA orconnector N | DC-2.5GHz Manual Control Step Attenuator |

Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.