

## 60dB Manual Control Step Attenuator DC-2.5GHz



### Product Description

RKT10G3A60 is a manual control step attenuator with a frequency range of DC to 2.5GHz.

The max average power of this attenuator is 10W. The attenuation range is 60dB.

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

### Features

- Very small package and broadband performance.
- Continuous variable attenuation during operation.
- Excellent Repeatability and Long Life.

### 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)

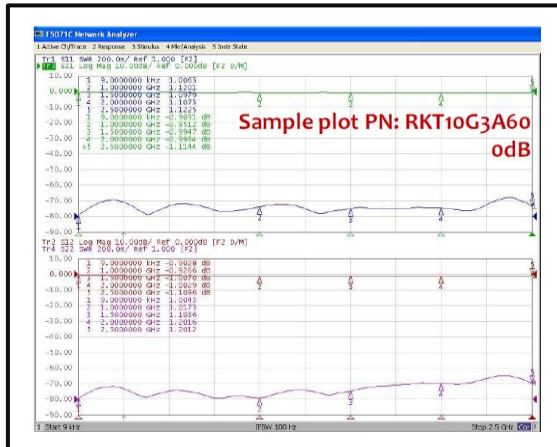
| Parameters           | Min. | Typ.                | Max. | Units |
|----------------------|------|---------------------|------|-------|
| Frequency Range      |      | DC-2.5              |      | GHz   |
| Attenuation Range    |      | 60                  |      | dB    |
| Attenuation Step     |      | 1,2,4,8,10,10,10,16 |      | dB    |
| Attenuation Accuracy |      | ±1.0                |      | dB    |
| VSWR                 |      |                     | 1.4  | :1    |
| Insertion Loss       |      |                     | 3.0  | dB    |
| Power Handling       |      | 10                  |      | Watts |
| Impedance            |      | 50                  |      | Ohms  |
| Weight               |      | 0.56 Max.           |      | lbs   |
| Connectors           |      | SMA / N Type        |      |       |

## Environmental Specifications and Test Standards

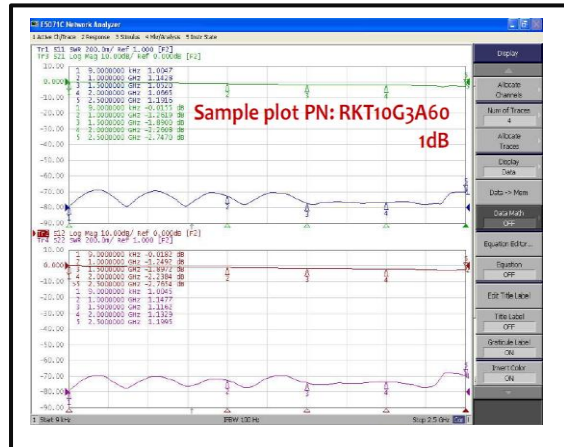
| Parameter                         | Description                                                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational Temperature           | -10°C to +50°C<br>(Case Temperature)                                                                                                                                                                            |
| Storage Temperature               | -40°C to +70°C                                                                                                                                                                                                  |
| Thermal Shock                     | -40°C → +85°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 +85°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)                                                                                                                                                                     |

Typical Performance Plots

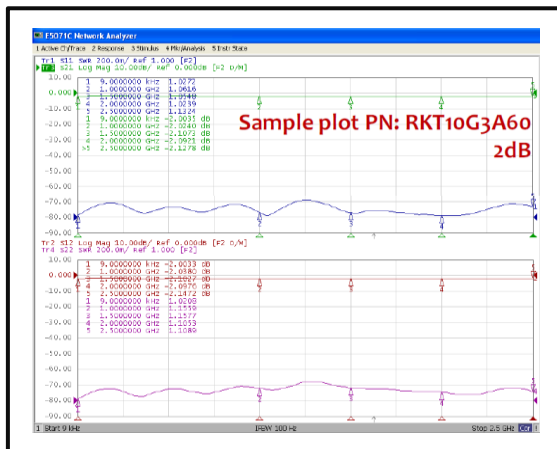
Pattern



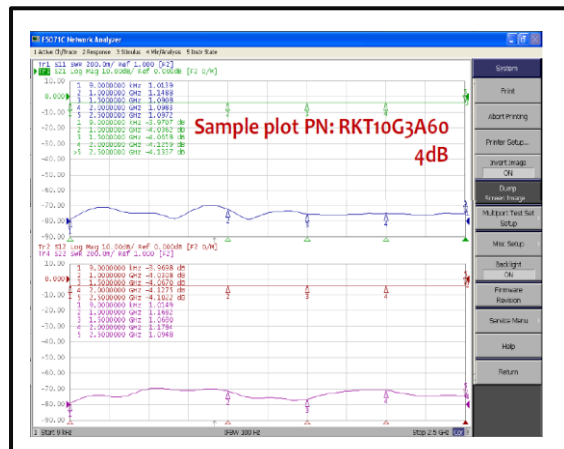
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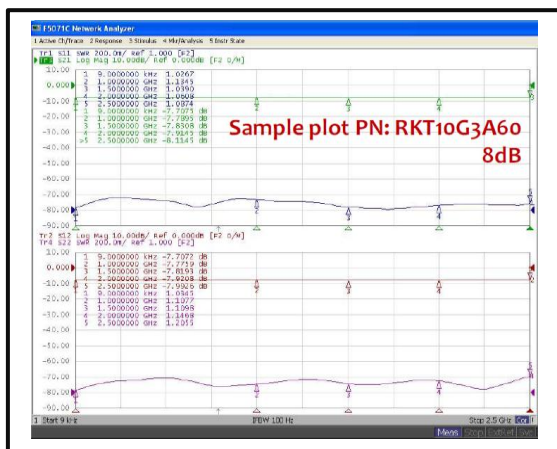
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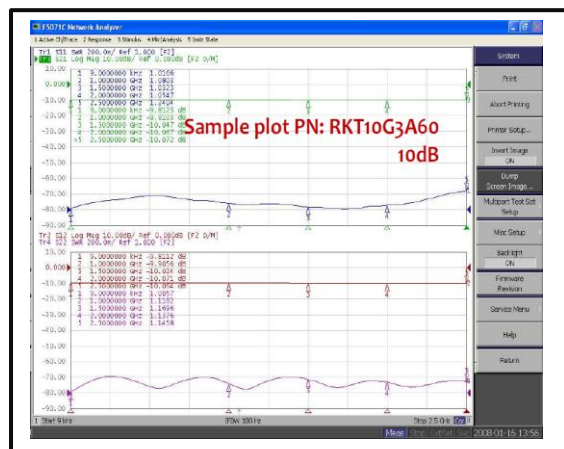
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Pattern

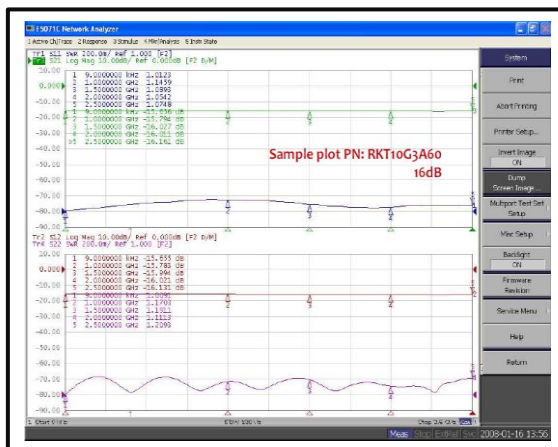


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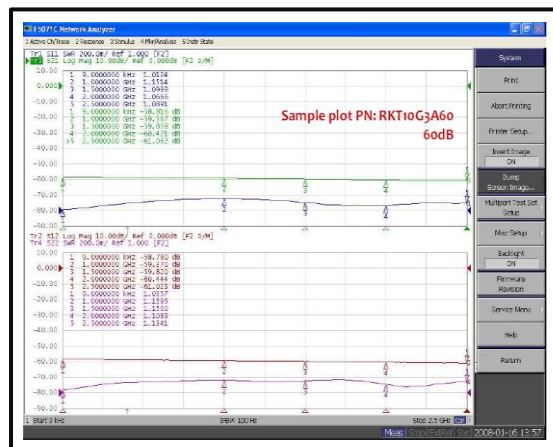


Typical Performance Plots

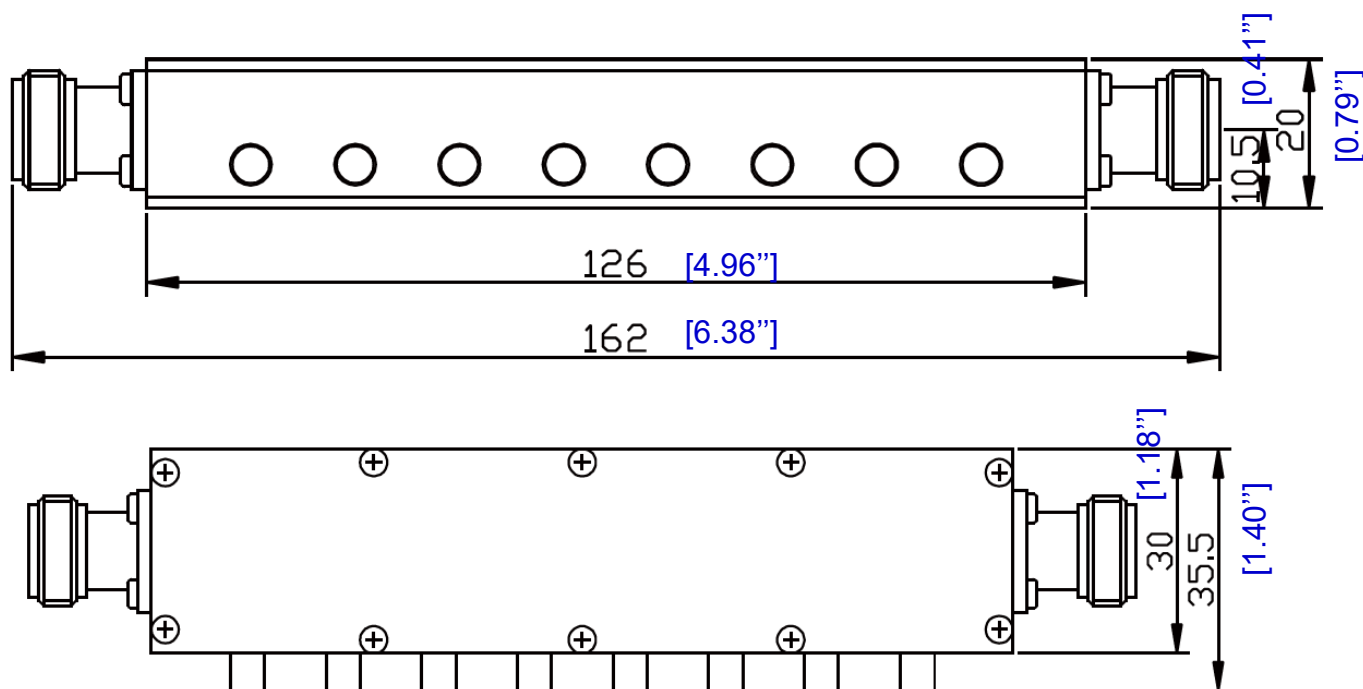
Pattern



Pattern

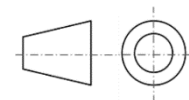


**Outline Drawing**



Notes:

1. All dimensions are in millimeters [inches].
2. Standard torque wrench must be used to secure RF connectors.



Additional Information

| Documentation                   | Webpage                                                                                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESD Policy                      | <a href="https://rflambda.com/pdf/rflambda_esd_control.pdf">https://rflambda.com/pdf/rflambda_esd_control.pdf</a>                                             |
| Connector Torque Specifications | <a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>                                   |
| Random Vibration Test Standard  | <a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a> |

## Ordering Information

| Part Number | Modification            | Description                               |
|-------------|-------------------------|-------------------------------------------|
| RKT10G3A60  | Connectors SMA / N Type | DC-2.5GHz Manual Control Step Attenuators |

## Important Notice

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