

Manual Control Step Attenuator DC - 4.3GHz



Product Description

RKT2G4A90 is a manual control step attenuator with a frequency range of DC to 4.3GHz.

The attenuator's average power is 2W CW. The attenuation range is 90dB with an attenuation step size of 1dB. The maximum insertion loss is 2.0dB with a VSWR of 1.7:1.

The connectors are N-Type.

Features

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

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 ($T_A=+25^{\circ}\text{C}$)

Parameter		Min.	Typ.	Max.	Units
Frequency Range			DC – 4.3		GHz
Attenuation Step Size			1		dB
Attenuation Range			90		dB
VSWR				1.7	:1
Insertion Loss				2.0	dB
Attenuation Accuracy	≤10dB		±0.5dB		
	<70dB		±0.8dB or 3%		
	≥70dB		±5%		
Average Power				2	W
Weight			3.6		lbs.
Impedance			50		Ω
Connectors			N Type		
Connectors Material			Brass Nickel Plated		
Female Pin			Beryllium Copper Gold Plated		

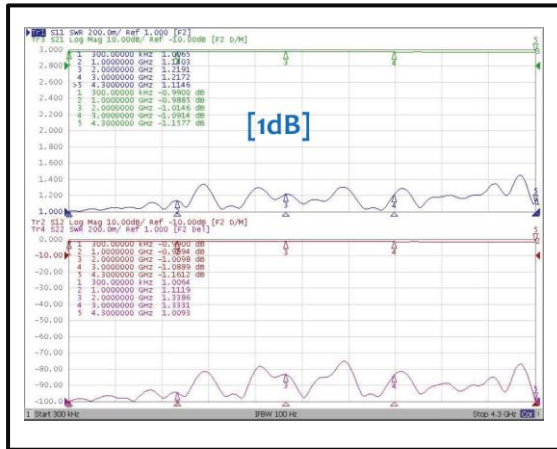
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°C to +85°C (Case Temperature)
Storage Temperature	-20°C to +85°C
Thermal Shock	-20°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)

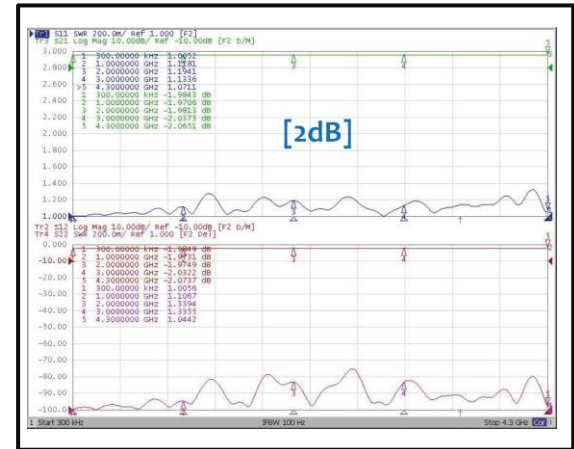
*For vibration testing details please see additional information section.

Typical Performance Plots

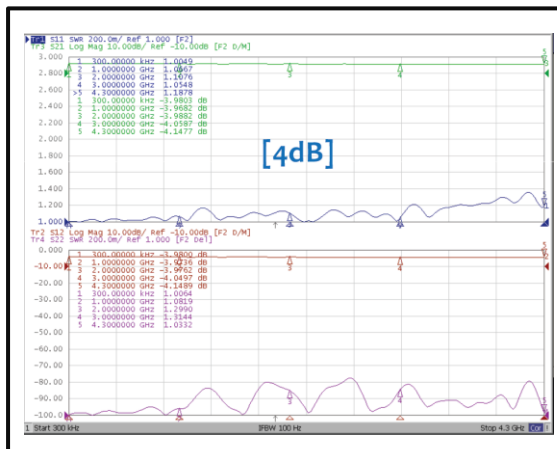
1dB



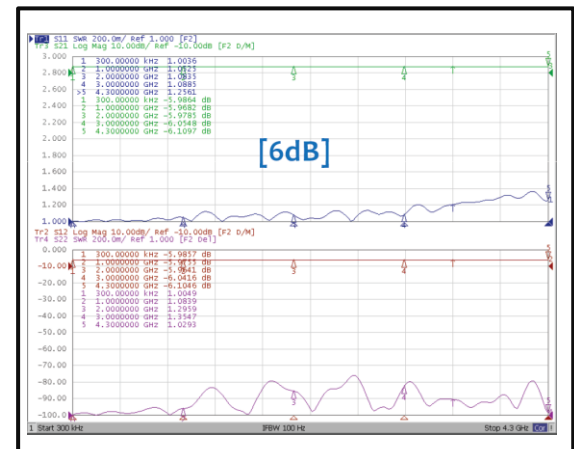
2dB



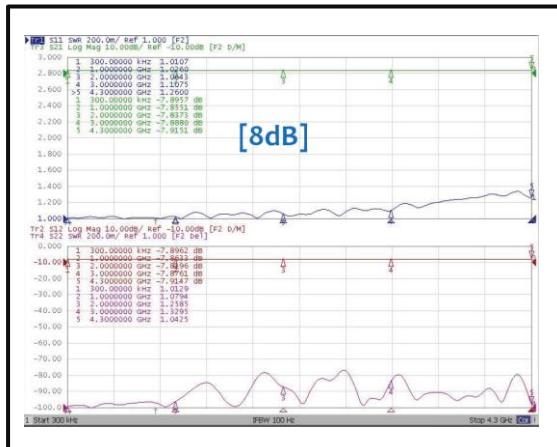
4dB



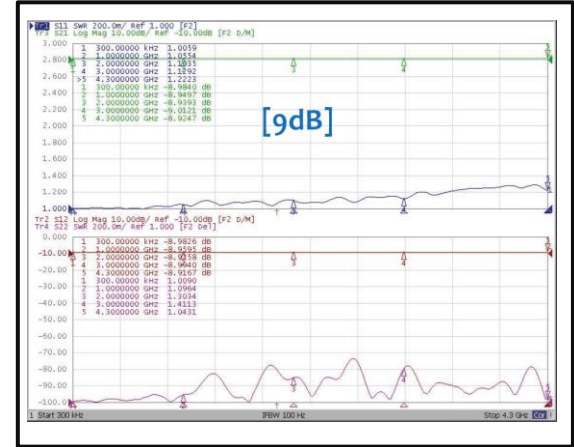
6dB



8dB

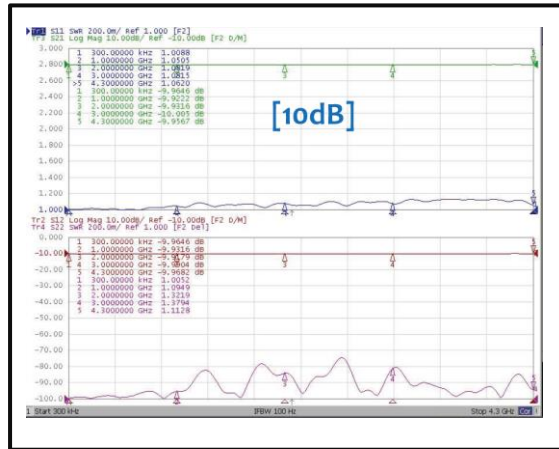


9dB

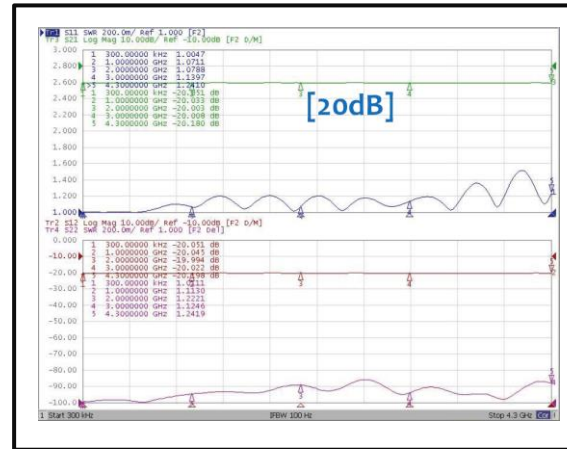


Typical Performance Plots

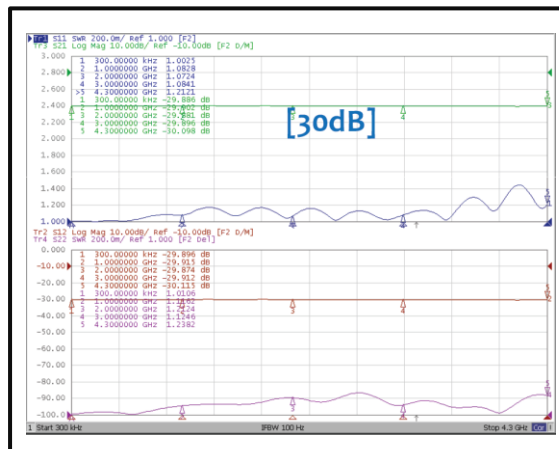
10dB



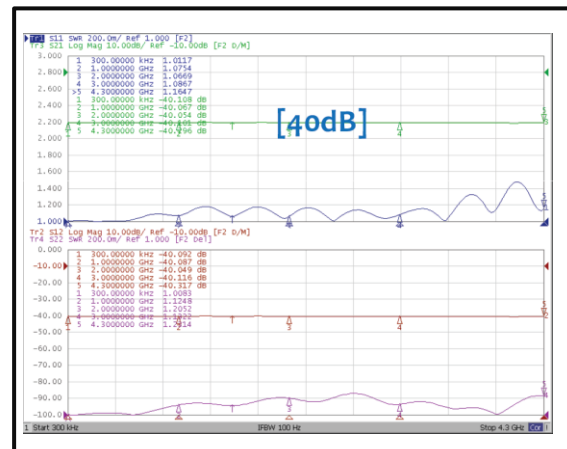
20dB



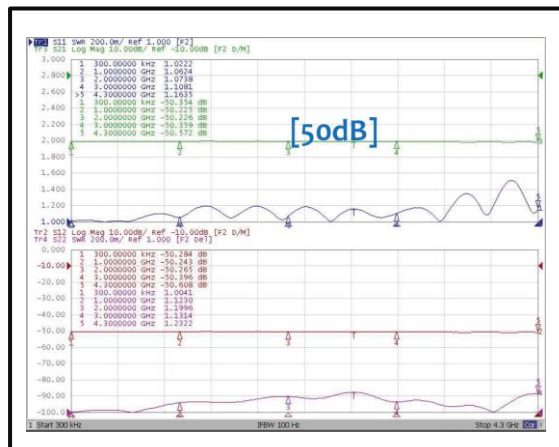
30dB



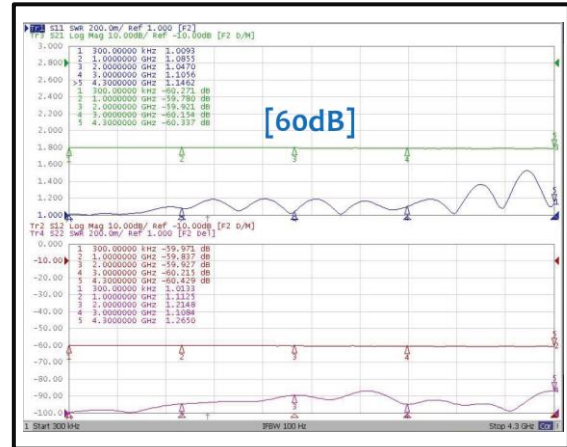
40dB



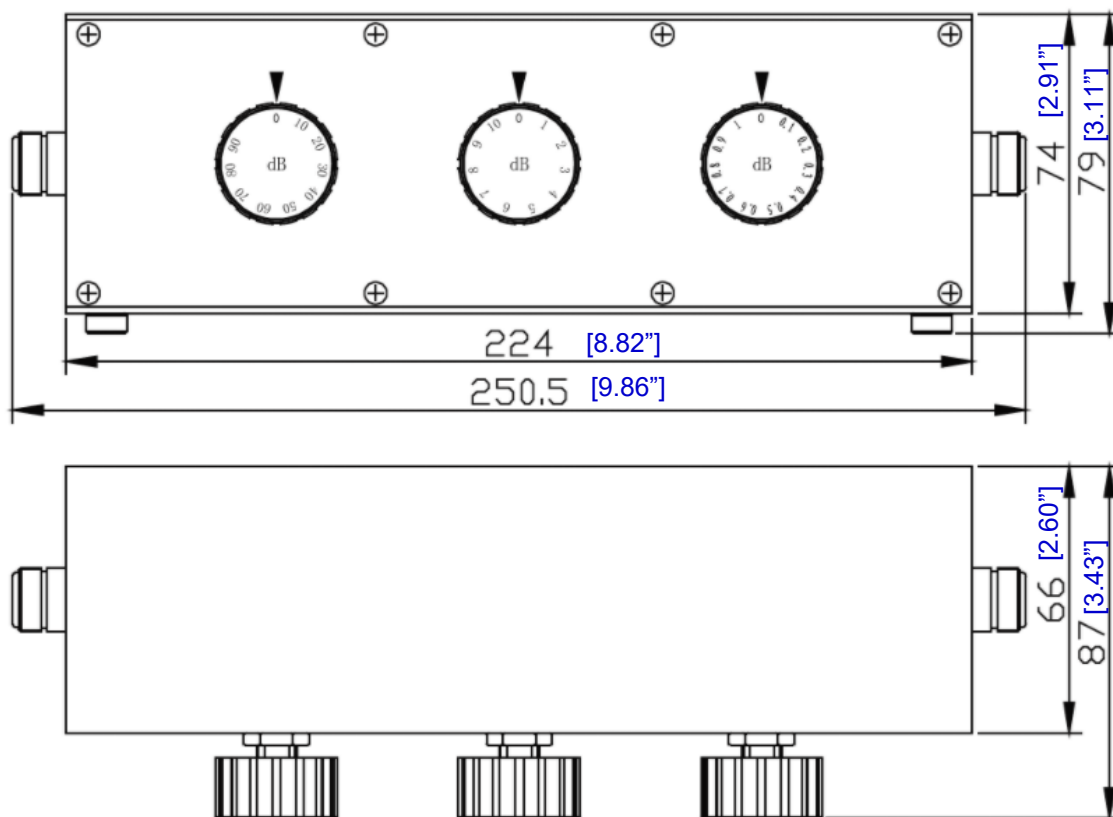
50dB



60dB



Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish :Blue Paint
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
RKT2G4A90	connector N Type	DC-4.3GHz Manual Control Step Attenuator

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