

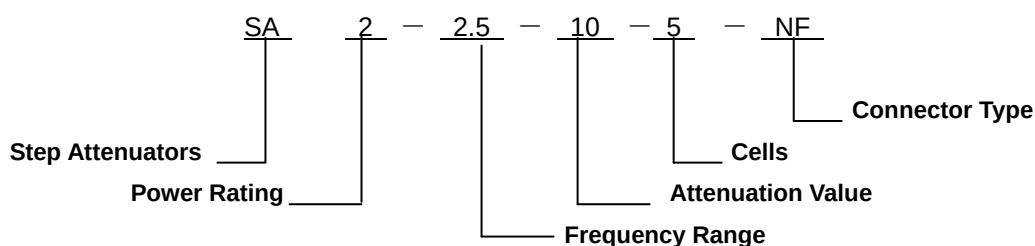
Variable/Step Attenuators

Product Description

Variable/step attenuator can be used to adjust the power signal level continuously or by step within certain frequency range, they can also to adjust the test system's power as inset attenuator. It is small with high accuracy and high stability etc.

Kete Microwave offers a series of step/variable attenuators from 2W to 30W with N, SMA or BNC. These parts can work at operating temperature range from -55℃~+85℃. If there have questions or requests, please contact with Kete Microwave.

HOW TO ORDER



Example

SA2-2.5-10-5-NF means step attenuators with power rating 2W, attenuation cells 5, attenuation value 10dB, Frequency range 2.5GHz, connector type NF.

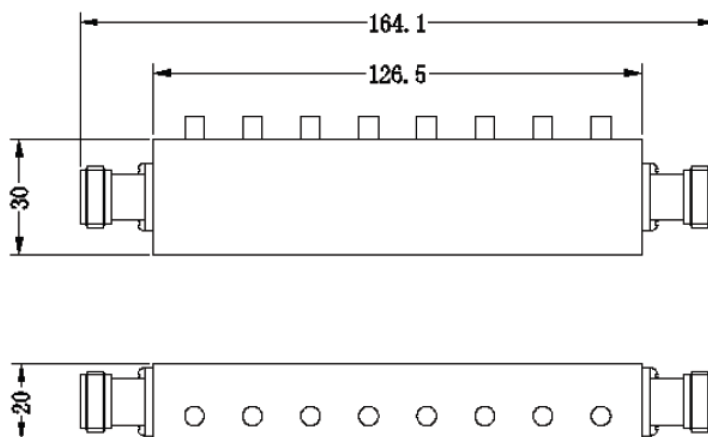
Step Attenuators

Part Number: SA2-2.5-90-8-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-2.5GHz
- ✧ **Power Rated:** 2W
- ✧ **Attenuation Range:** 0-90dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 16, 20, 20, 20 dB
- ✧ **Attenuation Tolerance:** ± 2.5 dB
- ✧ **VSWR (Max.):** 1.30:1
- ✧ **Insertion Loss (Max.):** 3.5dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 164.1x30x20 mm

Outline Drawing (mm)



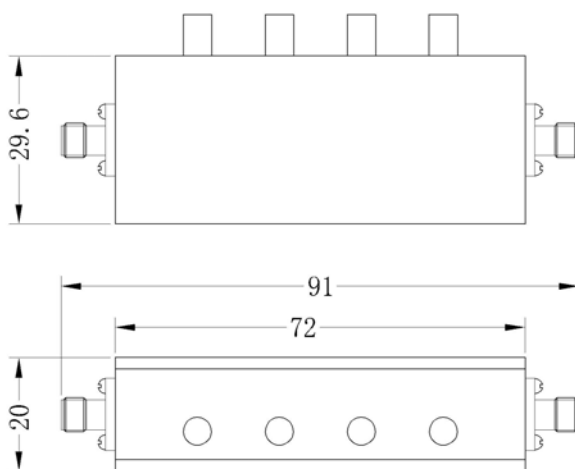
Step Attenuators

Part Number: SA2-2.7-10-4-SMAF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** 2.4 - 2.7GHz
- ✧ **Power Rated:** 2W
- ✧ **Attenuation Range:** 0-10dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8 dB
- ✧ **Attenuation Tolerance:** ± 2.5 dB
- ✧ **VSWR (Max.):** 1.50:1
- ✧ **Insertion Loss (Max.):** 3.0dB
- ✧ **Connector Type:** SMAF-SMAF
- ✧ **Operating Temp.:** -55°C~+85°C
- ✧ **Dimensions:** 91x29.6x20 mm

Outline Drawing (mm)



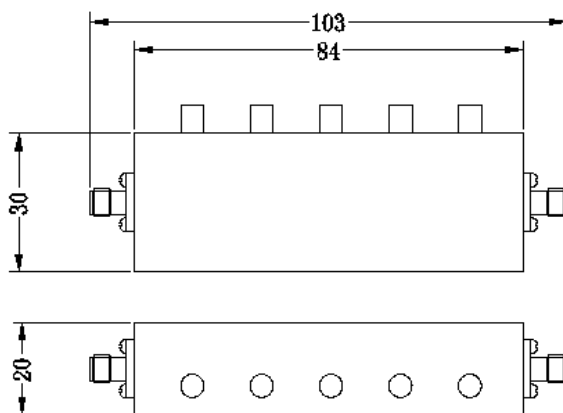
Step Attenuators

Part Number: SA2-2.7-20-5-SMAF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** 2.4 - 2.7GHz
- ✧ **Power Rated:** 2W
- ✧ **Attenuation Range:** 0-20dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 10 dB
- ✧ **Attenuation Tolerance:** ± 2.5 dB
- ✧ **VSWR (Max.):** 1.50:1
- ✧ **Insertion Loss (Max.):** 3.5dB
- ✧ **Connector Type:** SMAF-SMAF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 103x30x20 mm
- ✧ **Weight:** 150g

Outline Drawing (mm)



Dual Rotary Attenuators

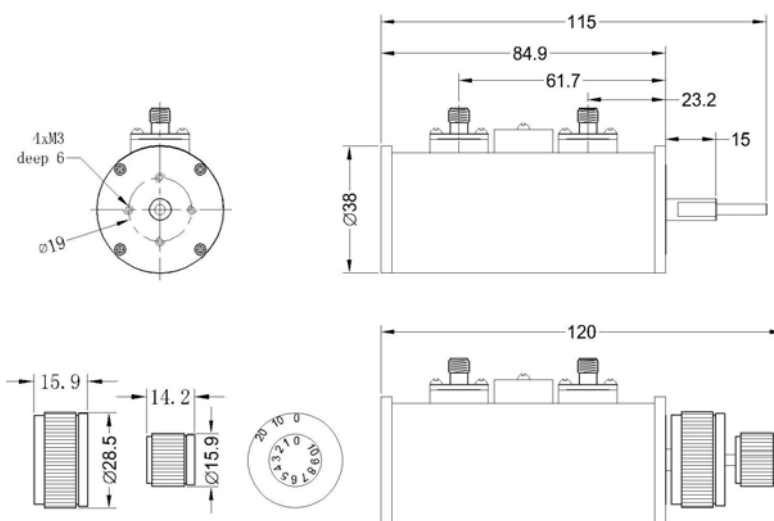
Part Number: DRA2-2.7-30-SMAF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-2.7GHz
- ✧ **Power Rated:** 2W
- ✧ **Attenuation Range:** 0-30dB
- ✧ **Attenuation Tolerance:** $\pm 0.5\text{dB}$ (DC-1GHz), $\pm 1.1\text{dB}$ (1-2.7GHz)
- ✧ **VSWR (Max.):** 1.30:1 (DC-1GHz), 1.40:1 (1-2.7GHz)
- ✧ **Insertion Loss (Max.):** 0.6dB
- ✧ **Connector Type:** SMAF-SMAF
- ✧ **Operating Temp.:** -55°C~+85°C
- ✧ **Dimensions:** $\Phi 38 \times 120$ mm (Tolerance $\pm 2\%$)



Outline Drawing (mm)



Single Rotary Attenuators

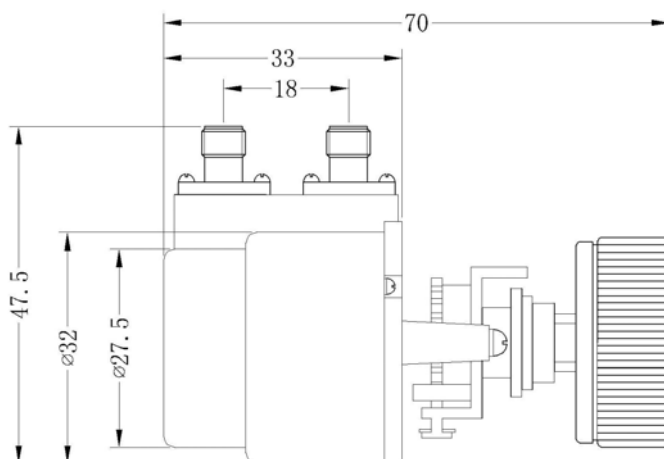
Part Number: SRA2-2.2-10-SMAF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-2.2GHz
- ✧ **Power Rated:** 2W
- ✧ **Attenuation Range:** 0-10dB
- ✧ **Attenuation Tolerance:** $\pm 0.2\text{dB}$ (DC-1GHz), $\pm 0.4\text{dB}$ (1-2.2GHz)
- ✧ **VSWR (Max.):** 1.20:1 (DC-1GHz), 1.25:1 (1-2.2GHz)
- ✧ **Insertion Loss (Max.):** 0.4dB
- ✧ **Connector Type:** SMAF-SMAF
- ✧ **Operating Temp.:** -55°C~+85°C
- ✧ **Dimensions:** $\Phi 47.5 \times 70$ mm (Tolerance $\pm 2\%$)



Outline Drawing (mm)



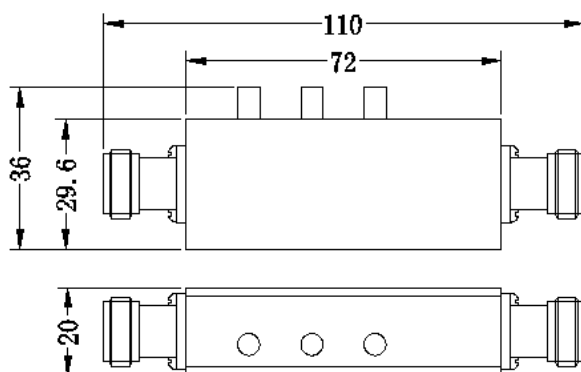
Step Attenuators

Part Number: SA10-2.5-30-3-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-2.5GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-30dB in 5dB Steps
- ✧ **Attenuation Step:** 5, 10, 15 dB
- ✧ **Attenuation Tolerance:** ± 1.4 dB
- ✧ **VSWR (Max.):** 1.40:1
- ✧ **Insertion Loss (Max.):** 2.0dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 110x36x20 mm

Outline Drawing (mm)



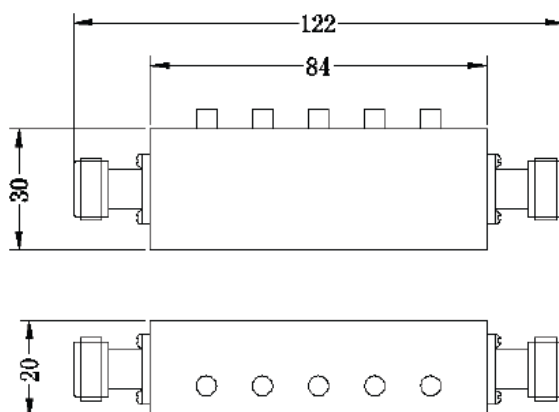
Step Attenuators

Part Number: SA10-2.5-30-5-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** 0.8 - 2.5GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-30dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 16 dB
- ✧ **Attenuation Tolerance:** ± 1.5 dB
- ✧ **VSWR (Max.):** 1.30:1
- ✧ **Insertion Loss (Max.):** 3.0dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 122x30x20 mm

Outline Drawing (mm)



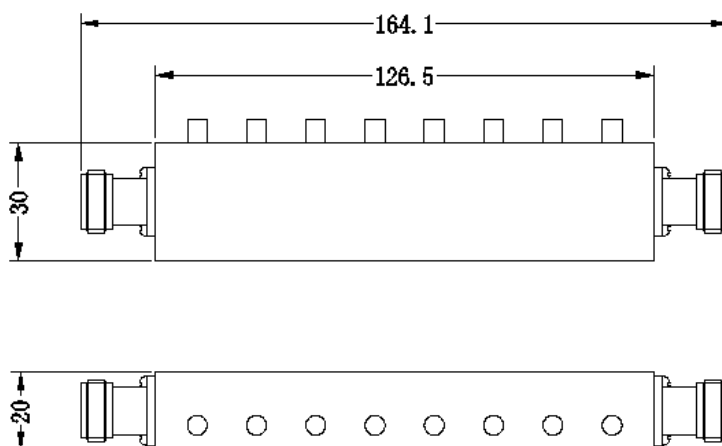
Step Attenuators

Part Number: SA10-2.5-100-8-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-2.5GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-100dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 16, 20, 20, 30 dB
- ✧ **Attenuation Tolerance:** ± 3.0 dB
- ✧ **VSWR (Max.):** 1.40:1
- ✧ **Insertion Loss (Max.):** 3.5dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 164.1x30x20 mm

Outline Drawing (mm)



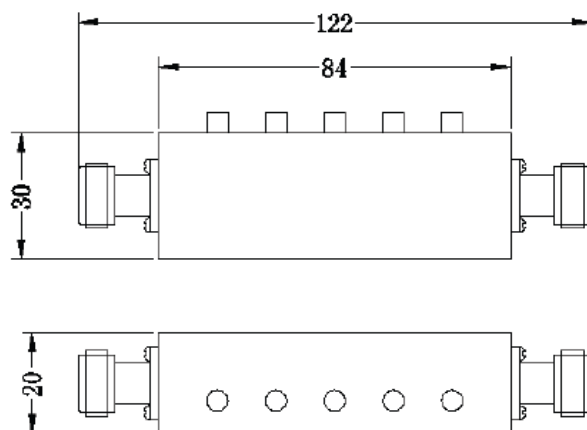
Step Attenuators

Part Number: SA10-2.5-120-5-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** 0.8 - 2.5GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-120dB in 10dB Steps
- ✧ **Attenuation Step:** 10, 20, 30, 30, 30 dB
- ✧ **Attenuation Tolerance:** ± 3.0 dB
- ✧ **VSWR (Max.):** 1.30:1
- ✧ **Insertion Loss (Max.):** 3.0dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55°C~+85°C
- ✧ **Dimensions:** 122x30x20 mm

Outline Drawing (mm)



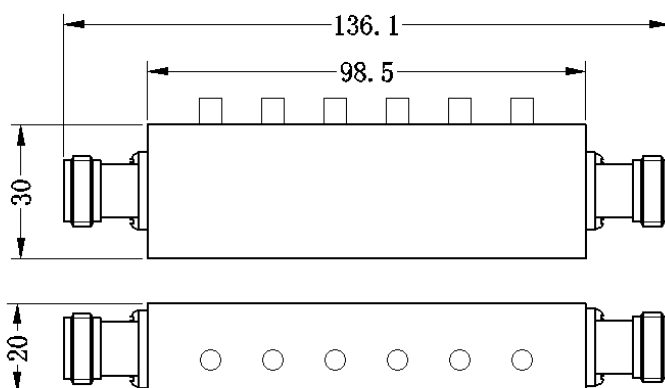
Step Attenuators

Part Number: SA10-2.5-120-6-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** 0.8 - 2.5GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-120dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 10, 20, 30, 30, 30 dB
- ✧ **Attenuation Tolerance:** ± 3.0 dB
- ✧ **VSWR (Max.):** 1.30:1
- ✧ **Insertion Loss (Max.):** 3.0dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 136.1x30x20 mm

Outline Drawing (mm)



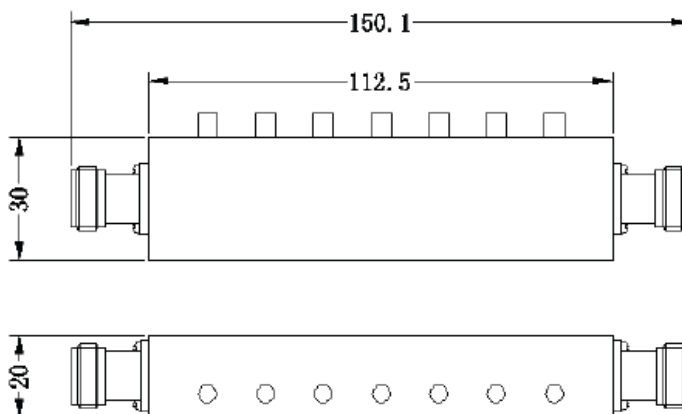
Step Attenuators

Part Number: SA10-2.7-50-7-NF

Electrical Specifications

- ✧ **Frequency Range:** 0.8 - 2.7GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-50dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 10, 10, 16 dB
- ✧ **Attenuation Tolerance:** ± 3.0 dB
- ✧ **VSWR (Max.):** 1.50:1
- ✧ **Insertion Loss (Max.):** 3.5dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- ✧ **Dimensions:** 150.1x30x20 mm

Outline Drawing (mm)



Step Attenuators

Part Number: SA10-3-20-5-NF

Electrical Specifications

- ✧ **Impedance:** 50 Ω
- ✧ **Frequency Range:** DC-3GHz
- ✧ **Power Rated:** 10W
- ✧ **Attenuation Range:** 0-20dB in 1dB Steps
- ✧ **Attenuation Step:** 1, 2, 4, 8, 10 dB
- ✧ **Attenuation Tolerance:** ± 3.0 dB
- ✧ **VSWR (Max.):** 1.50:1
- ✧ **Insertion Loss (Max.):** 3.5dB
- ✧ **Connector Type:** NF-NF
- ✧ **Operating Temp.:** -55 $^{\circ}$ C~+85 $^{\circ}$ C
- ✧ **Dimensions:** 122x30x20 mm

Outline Drawing (mm)

