# SKA-1832732537-KFKF-A1-M

# High Dynamic Range Electrical Attenuator, 18 to 26.5 GHz

## **Description:**

**Model SKA-1832732537-KFKF-A1-M** is MMIC based electrical attenuator. The attenuator exhibits 2.5 dB typical insertion loss and 0 to 37 dB nominal attenuation range across the frequency range of 18.0 to 26.5 GHz while applying 0 to -3  $V_{DC}$  control voltage. While the control voltage of the standard model is 0 to -3  $V_{DC}$ , the maximum damage control voltage is - 5  $V_{DC}$ . The RF input and output ports are K(F) connectors, and the control port is a SMA(F) connector.

### Features:

- Broadband Operation
- High Dynamic Range
- Compact Package Size



#### **Applications:**

- Radar Systems
- Communication Systems
- Testing Equipment

| Electrical | Specifications: |
|------------|-----------------|
|------------|-----------------|

| Parameter                    | Minimum  | Typical                 | Maximum            |
|------------------------------|----------|-------------------------|--------------------|
| Frequency                    | 18.0 GHz |                         | 26.5 GHz           |
| Insertion Loss               |          | 2.5 dB                  |                    |
| Attenuation Range            |          | 37 dB                   |                    |
| Input P <sub>1dB</sub>       |          | +10 dBm                 |                    |
| Damage RF Power Level        |          |                         | +30 dBm            |
| Control Voltage              |          | 0 to -3 V <sub>DC</sub> |                    |
| Damage Control Voltage Level |          |                         | -5 V <sub>DC</sub> |
| Input Return Loss            |          | 8 dB                    |                    |
| Output Return Loss           |          | 9 dB                    |                    |
| Specification Temperature    |          | +25 °C                  |                    |
| Operating Temperature        | 0°C      |                         | +50 °C             |

### **Mechanical Specifications:**

| Item               | Specification                     |       |
|--------------------|-----------------------------------|-------|
| RF Ports           | K(F)                              | 100 0 |
| Bias Port          | SMA(F)                            |       |
| Case Material      | Aluminum                          |       |
| Connector Material | Passivate Stainless Steel         |       |
| Finish             | Gold Plated                       |       |
| Weight             | 0.68 Oz                           |       |
| Size               | 0.80" (W) x 0.80" (L) x 0.39" (H) |       |
| Outline            | UH-235-3C                         |       |



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## High Dynamic Range Electrical Attenuator, 18 to 26.5 GHz



#### **Typical Attenuation vs. Frequency**

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE: COAX CAN BE MALE OR FEMALE

RoHS

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# Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit. •
- All testing was performed under +25°C case temperature.
- Other mechanical configurations are available under different model numbers. •
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice. •

#### **Caution:**

- Exceeding absolute maximum ratings shown will damage the device. •
- The attenuator is a static sensitive device. Always follow ESD rules when working with the • attenuator.
- Any foreign objects in the attenuator will cause performance degradation and possible device damage.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.92 \pm 0.05$  Nm), should be applied. SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.





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