

30 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 4 GHz Rated to 25 Watts, Heatsink Body, 1.25 VSWR

SA4S25-30



Features

- Bidirectional
- DC to 4 GHz Frequency Range
- Attenuation 30±1 dB
- Max Power 25 Watts (CW)
- VSWR < 1.25:1

Applications

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

Description

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (or attenuate) a known amount. These attenuator pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The SA4S25-30 is a 30 dB Fixed Attenuator that operates from DC to 4 GHz and is rated to 25 Watts. The versatile coaxial package uses SMA male to SMA female connectors. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--|---------|---------|---------|--------|
| Frequency Range | DC | | 4 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 30 | | dB |
| Attenuation Accuracy | | 1 | | dB |
| VSWR | | | 1.25:1 | |
| Input Power, CW | | | 25 | Watts |
| rated at +25°C, derated linearly to 2.5W at +125°C | | | | |
| Input Power, Peak | | | 5 | kWatts |
| 5µs pulse, 0.25% duty cycle | | | | |

Electrical Specification Notes:
Values at +25°C, sea level.

Mechanical Specifications

Size

| | |
|---------------------------|----------------------------------|
| Length | 2.75 in [69.85 mm] |
| Width/Diameter | 1.5 in [38.1 mm] |
| Height | 1.46 in [37.08 mm] |
| Weight | 0.316 lbs [143.34 g] |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

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Configuration

Design Fixed, Bidirectional
Package Style Connectorized Module

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------|----------------------------|----------------------------|
| Type | SMA Male | SMA Female |
| Connector Specification | MIL-STD-348A | MIL-STD-348A |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |

Environmental Specifications

Temperature

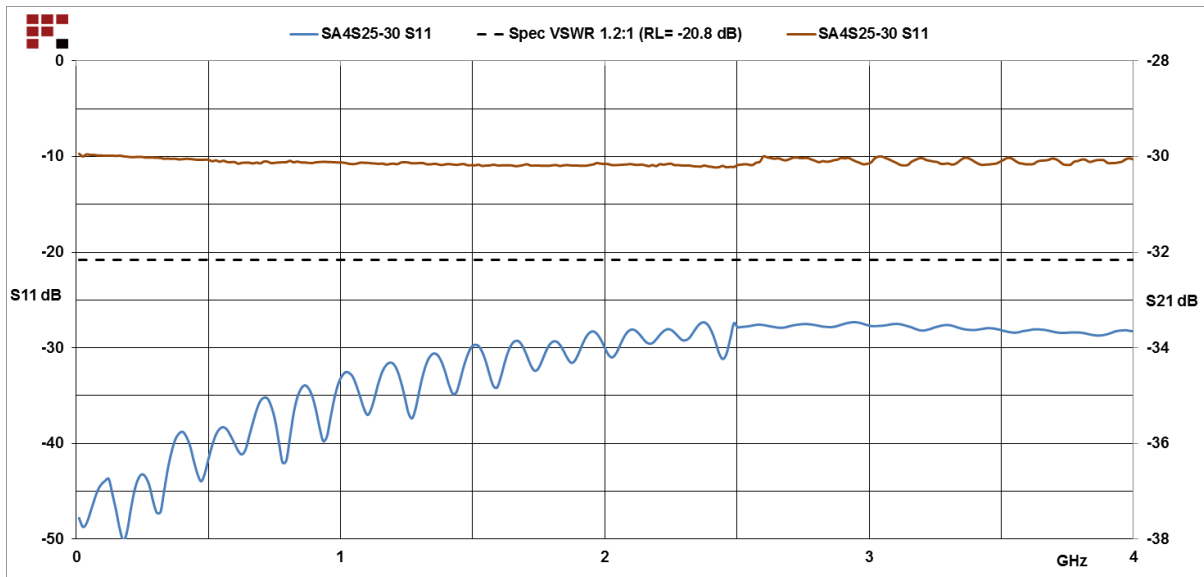
Operating Range -55 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



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30 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 4 GHz Rated to 25 Watts, Heatsink Body, 1.25 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [30 dB Fixed Attenuator SMA Male \(Plug\) to SMA Female \(Jack\) Up to 4 GHz Rated to 25 Watts, Heatsink Body, 1.25 VSWR SA4S25-30](https://www.fairviewmicrowave.com/30db-fixed-attenuator-sma-male-sma-female-25-watts-sa4s25-30-p.aspx)

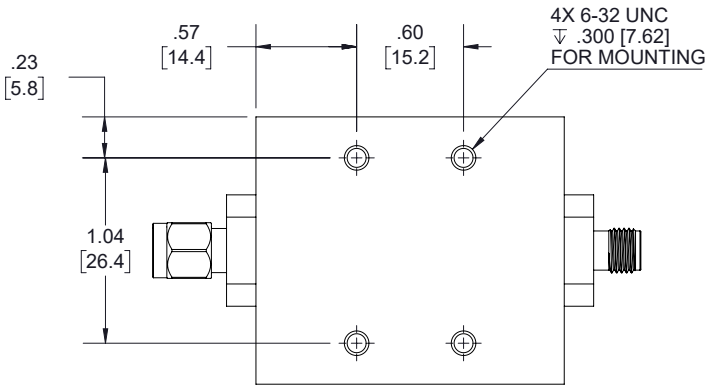
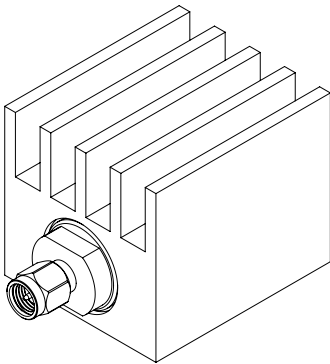
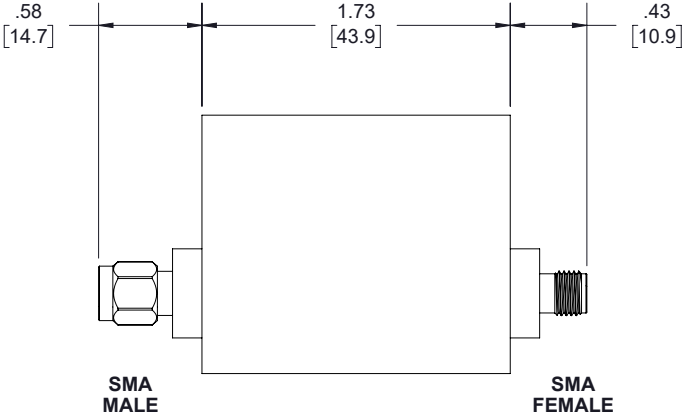
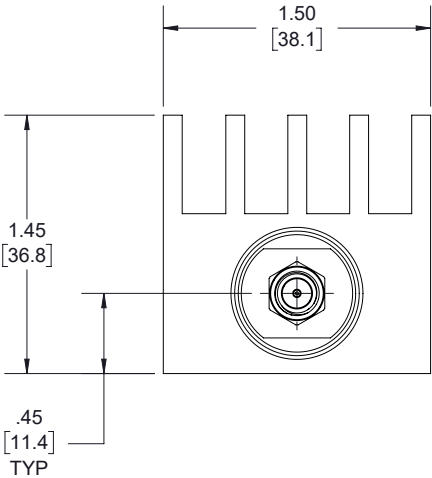
URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-sma-male-sma-female-25-watts-sa4s25-30-p.aspx>

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SA4S25-30 CAD Drawing

30 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 4 GHz Rated to 25 Watts, Heatsink Body, 1.25 VSWR

| REVISIONS | | | |
|-----------|---------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | PCR SA4S25-30 | 4/8/2020 | S.PONG |



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TITLE

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

| TOLERANCES: | | CABLE LENGTH (L) TOLERANCES: | |
|--------------------|------------------|---|--|
| .X = ±.2 [5.08] | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0 | |
| .XX = ±.02 [.51] | ANGLES ± 1° | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | |
| .XXX = ±.005 [.13] | | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 | |
| | | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 | |
| | | 300 [7620] < L = +5%L / -0 | |

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|------|-----------|----------|-----------|-----|
| A | 3FKR5 | K.DANG | SA4S25-30 | A |

T-Rev.D