

## 0 to 20 dB Variable Attenuator SMA Female to SMA Female from 8 GHz to 12.4 GHz Rated to 5 Watts

FMAT7434-20 from Fairview Microwave is a continuously variable attenuator that has 20 dB of total attenuation with rotary dial design for continuous attenuation level adjustment across a frequency range from 8 to 12.4GHz. With SMA female connectors, this RF variable attenuator design is tried and true technology that offers exceptional RF performance characteristics that include 0.75 dB maximum insertion loss and a maximum VSWR of 1.6:1. Continuously variable attenuators are part of the comprehensive RF attenuator product offerings from Fairview Microwave which are available in stock and ready for same-day shipment.

### Configuration

- Design: Continuously Variable Attenuator
- Body Material and Plating: Aluminum

### Electrical Specifications\*

| Description       | Min | Typ     | Max   | Units  |
|-------------------|-----|---------|-------|--------|
| Frequency Range   | 8   |         | 12.4  | GHz    |
| Impedance         |     | 50      |       | Ohms   |
| Attenuation Value |     | 0 to 20 |       | dB     |
| Insertion Loss    |     |         | 0.75  | dB     |
| Input Power (CW)  |     |         | 5     | Watts  |
| Peak Power        |     |         | 3     | kWatts |
| VSWR              |     |         | 1.6:1 |        |

\* Values at 25°C, sea level

### Mechanical Specifications

#### Temperature

Operating Range -40 to +85 deg C

#### Size

Length 3.07 in [77.98 mm]

Width 1.99 in [50.55 mm]

Height 0.5 in [12.7 mm]

Weight 0.19 lbs [86.18 g]

### Connectors

| Description                | Connector 1            | Connector 2            |
|----------------------------|------------------------|------------------------|
| Type                       | SMA Female             | SMA Female             |
| Contact Material & Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Material & Plating    | Brass, Nickel          | Brass, Nickel          |



### Features:

- 20dB Attenuation Level
- Rotary Dial Design for Continuous Adjustment
- Frequency Range from 8GHz to 12.4GHz
- SMA Female Connectorized Design
- Max VSWR 1.6:1
- Max Power Rating: 5W (CW)

### Applications:

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

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

**Plotted and Other Data**

Notes:

- Values at 25 °C, sea level

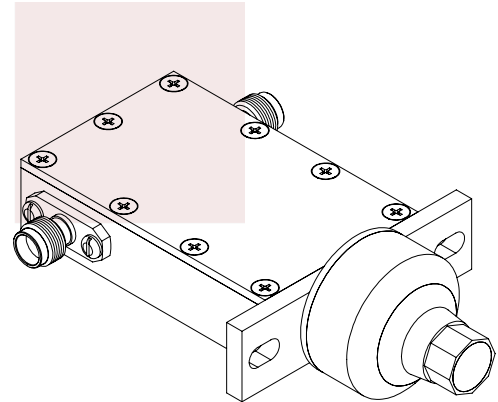
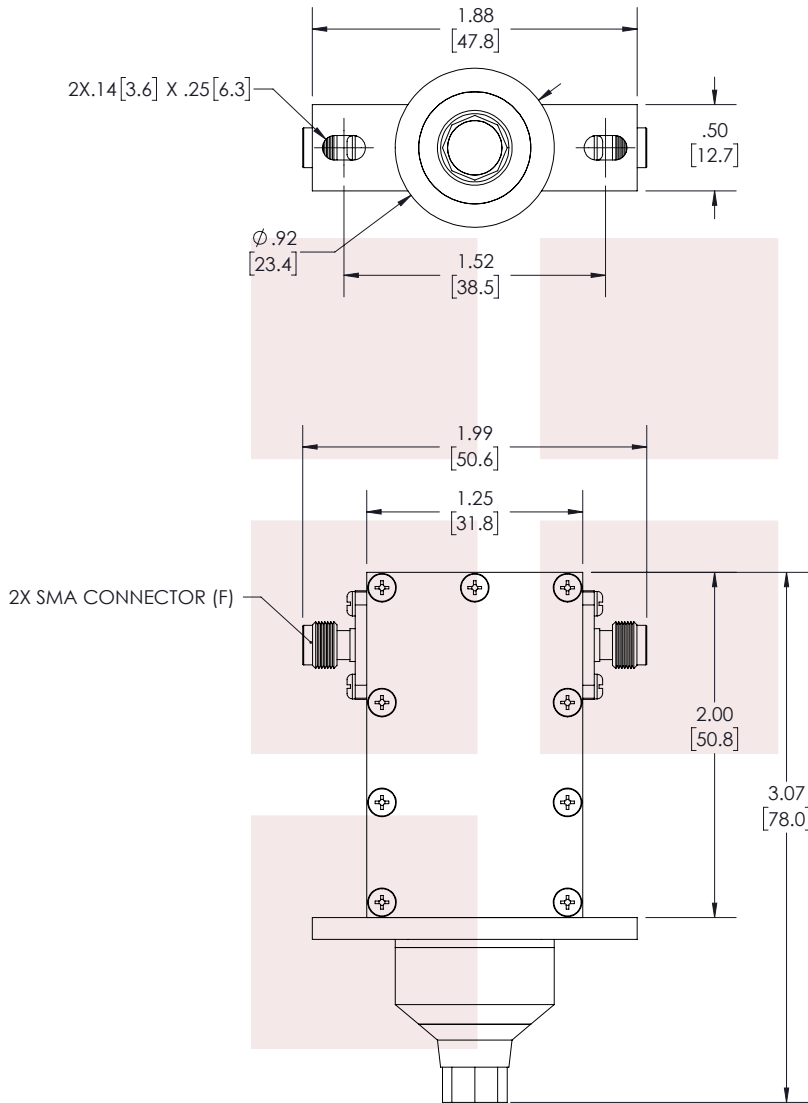
0 to 20 dB Variable Attenuator SMA Female to SMA Female from 8 GHz to 12.4 GHz Rated to 5 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [0 to 20 dB Variable Attenuator SMA Female to SMA Female from 8 GHz to 12.4 GHz Rated to 5 Watts FMAT7434-20](#)

URL: <https://www.fairviewmicrowave.com/20db-continuously-variable-attenuator-sma-female-sma-female-5-watts-fmat7434-20-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 02/17/2022 | SPONG    |



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TITLE

0 to 20 dB Variable Attenuator SMA Female to SMA Female from 8 GHz to 12.4 GHz Rated to 5 Watts

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

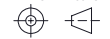
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32  
.XX = ±.02 [.51] ANGLES ± 1°  
.XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE

N/A

|           |                    |                        |                         |          |
|-----------|--------------------|------------------------|-------------------------|----------|
| SIZE<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>VTHANGARAJ | ITEM NO.<br>FMAT7434-20 | REV<br>A |
|-----------|--------------------|------------------------|-------------------------|----------|

T-Rev.D