

4 dB Fixed Attenuator 3.5mm Male (Plug) to 3.5mm Female (Jack) up to 26.5 GHz Rated to 2 Watts, Aluminum Body, 1.45:1 VSWR



## FMAT7471-4

### Features

- DC to 26.5 GHz Range
- Attenuation 4 + 1.0 dB
- 2 Watts Average Input Power
- VSWR <1.45:1
- Functional up to 33 GHz

### Applications

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

### 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 (attenuate) a known amount. These attenuators 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 FMAT7471-4 is a 4 dB Fixed Attenuators that operates from DC to 26.5 GHz and is rated to 2 Watts. The versatile coaxial package uses 3.5mm male to 3.5mm female connectors.

### Electrical Specifications

| Description                      | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|-------|
| Frequency Range                  | DC      |         | 26.5    | GHz   |
| Impedance                        |         | 50      |         | Ohms  |
| Nominal Attenuation              |         | 4       |         | dB    |
| VSWR                             |         |         | 1.45:1  |       |
| Input Power, CW                  |         |         | 2       | Watts |
| Derated linearly to 0.5W @ 125°C |         |         |         |       |
| Input Power, Peak                |         |         | 500     | Watts |
| 5μs pulse, 0.4% duty cycle       |         |         |         |       |

### Specifications by Frequency

| Description               | F1         | F2 | F3 | F4 | F5 | Units |
|---------------------------|------------|----|----|----|----|-------|
| Frequency Range           | DC to 26.5 |    |    |    |    | GHz   |
| Attenuation Accuracy, Typ | 1          |    |    |    |    | dB    |

### Mechanical Specifications

#### Size

|                |                     |
|----------------|---------------------|
| Length         | 1.437 in [36.5 mm]  |
| Width/Diameter | 0.394 in [10.01 mm] |
| Height         | 0.394 in [10.01 mm] |
| Weight         | 0.055 lbs [24.95 g] |

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|                           |          |
|---------------------------|----------|
| Body Material and Plating | Aluminum |
| <b>Configuration</b>      |          |
| Design                    | Fixed    |

### Connectors

| Description                  | Connector 1     | Connector 2            |
|------------------------------|-----------------|------------------------|
| Type                         | 3.5mm Male      | 3.5mm Female           |
| Contact Material and Plating | Brass, Gold     | Beryllium Copper, Gold |
| Body Material and Plating    | Stainless Steel | Stainless Steel        |

### Environmental Specifications

|                    |                   |
|--------------------|-------------------|
| <b>Temperature</b> |                   |
| Operating Range    | -55 to +125 deg C |

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

### Plotted and Other Data

Notes:

### Typical Performance Data

4 dB Fixed Attenuator 3.5mm Male (Plug) to 3.5mm Female (Jack) up to 26.5 GHz Rated to 2 Watts, Aluminum Body, 1.45:1 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.

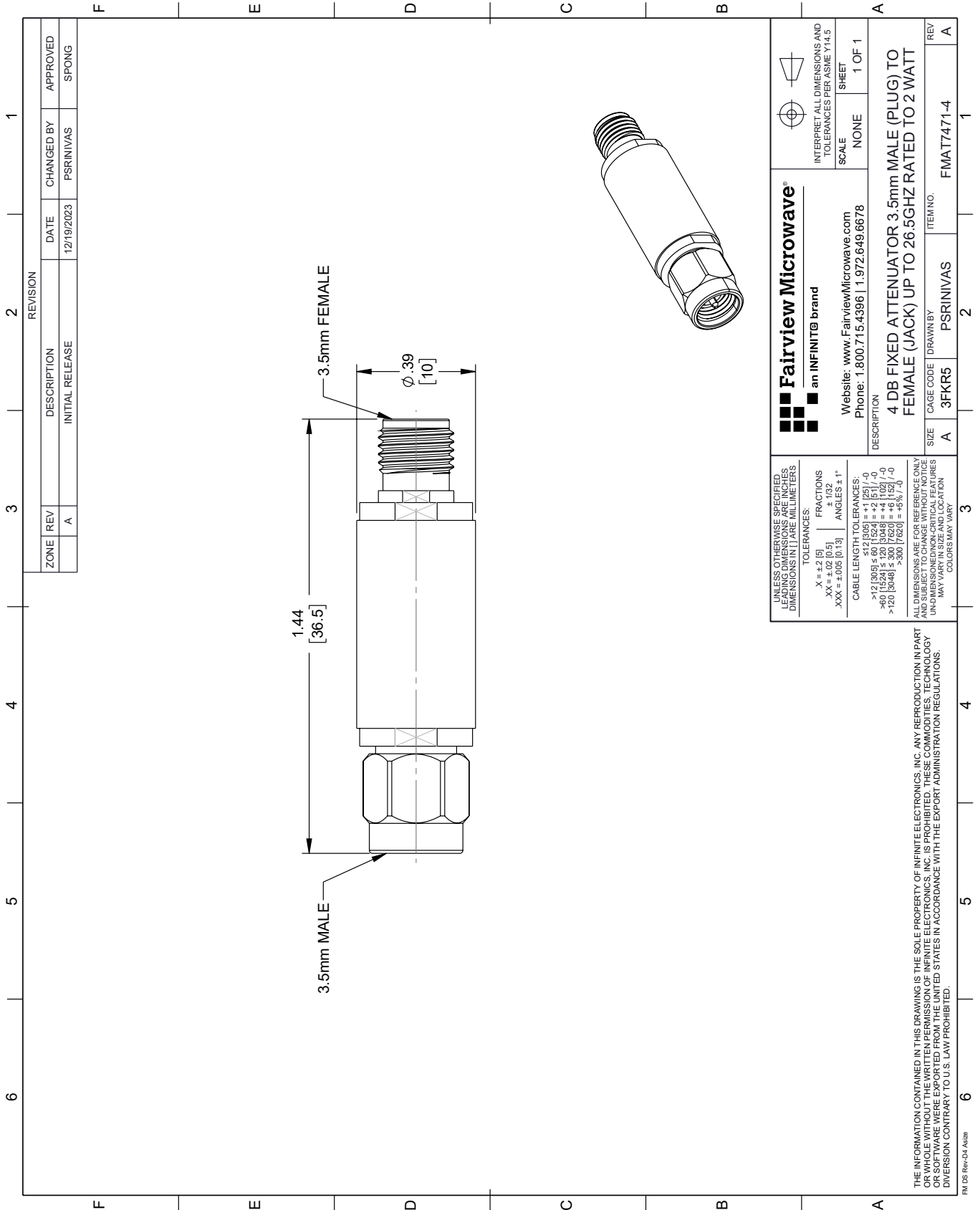
For additional information on this product, please click the following link: [4 dB Fixed Attenuator 3.5mm Male \(Plug\) to 3.5mm Female \(Jack\) up to 26.5 GHz Rated to 2 Watts, Aluminum Body, 1.45:1 VSWR FMAT7471-4](#)

URL: <https://www.fairviewmicrowave.com/4db-fixed-attenuator-3.5mm-male-3.5mm-female-2-watts-fmat7471-4-p.aspx>

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# FMAT7471-4 CAD Drawing

4 dB Fixed Attenuator 3.5mm Male (Plug) to 3.5mm Female (Jack) up to 26.5 GHz Rated to 2 Watts, Aluminum Body, 1.45:1 VSWR



| REVISION |     | DATE            | CHANGED BY | APPROVED |
|----------|-----|-----------------|------------|----------|
| ZONE     | REV | DESCRIPTION     | PSR/NIVAS  | SPONG    |
|          | A   | INITIAL RELEASE |            |          |

|   |  |   |   |
|---|--|---|---|
| <br><b>Fairview Microwave</b><br>an INFINIT® brand  |  | Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a><br>Phone: 1.800.715.4396   1.972.649.6678                               | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1                        |
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.  |  | TOLERANCES:<br>.X = ±.2 [5]<br>.XX = ±.02 [0.5]<br>.XXX = ±.005 [0.13]  | FRACTIONS: ± 1/32<br>ANGLES: ± 1°   |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.   |  | CABLE LENGTH TOLERANCES:<br><12 [305] ≤ 60 [1524] = ±.1 [25] / -0<br>>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0<br>>120 [3048] ≤ 300 [7620] = ±.8 [20] / -0 | DESCRIPTION:<br><b>4 DB FIXED ATTENUATOR 3.5mm MALE (PLUG) TO FEMALE (JACK) UP TO 26.5GHZ RATED TO 2 WATT</b> |
| THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE ARE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED. | SIZE: A<br>CAGE CODE: 3FKR5<br>DRAWN BY: PSR/NIVAS<br>ITEM NO.: FMAT7471-4 | REV: A  | SHEET: 1 OF 1   |