

10 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



FMAT7471-10

Features

- DC to 26.5 GHz Range
- Attenuation 10 + 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 FMAT7471-10 is a 10 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 | | 10 | | 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] |
| Weight | 0.01764 lbs [8 g] |
| Body Material and Plating | Aluminum |

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| Configuration | |
|---------------|-------|
| 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

| 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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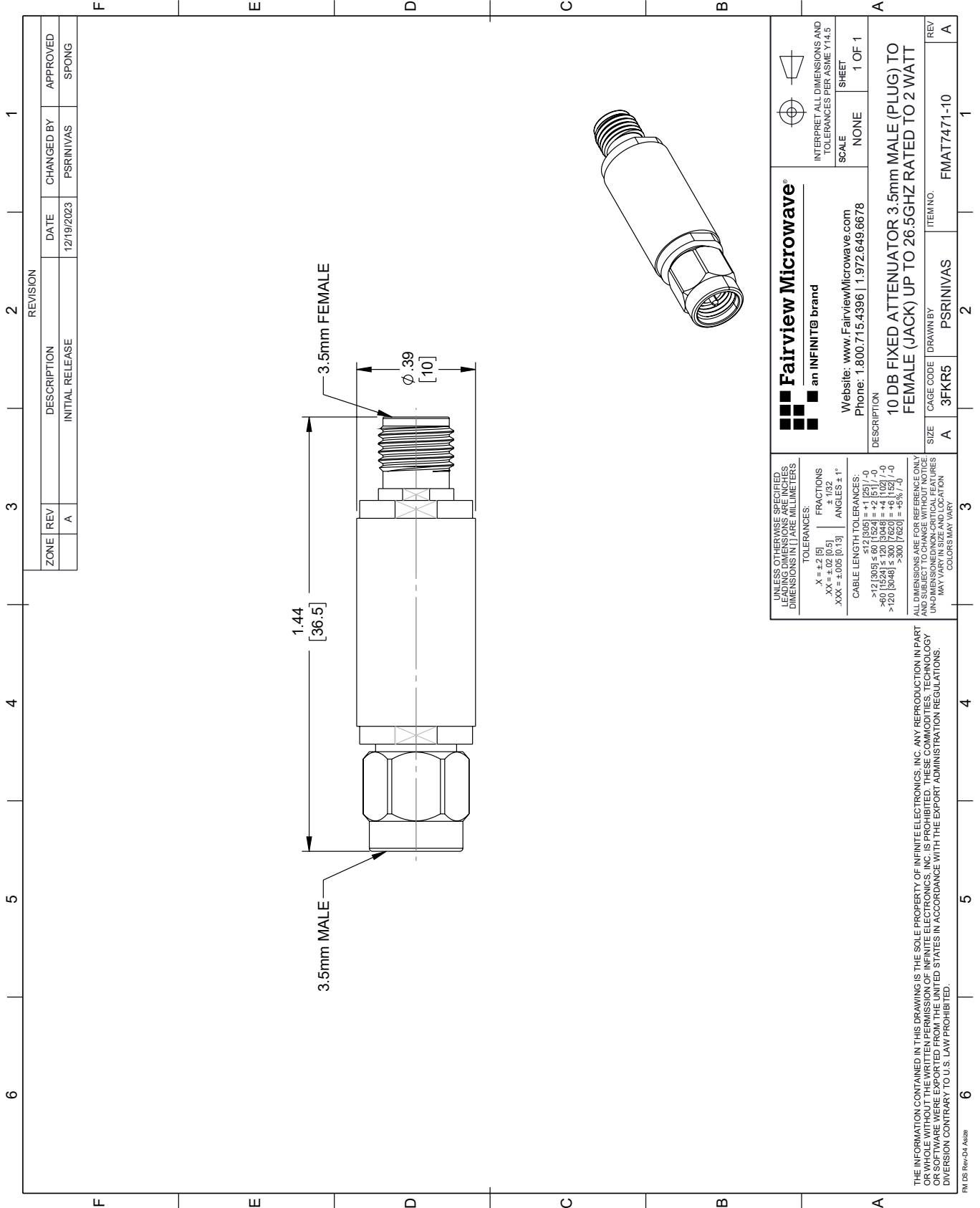
For additional information on this product, please click the following link: [10 dB Fixed Attenuator 3.5mm Male \(Plug\) to 3.5mm Female \(Jack\) up to 26.5 GHz Rated to 2 Watts, Aluminum Body, 1.45:1 VSWR FMAT7471-10](#)

URL: <https://www.fairviewmicrowave.com/10db-fixed-attenuator-3.5mm-male-3.5mm-female-2-watts-fmat7471-10-p.aspx>

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FMAT7471-10 CAD Drawing

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

Fairview Microwave
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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE NONE SHEET 1 OF 1

DESCRIPTION: 10 DB FIXED ATTENUATOR 3.5mm MALE (PLUG) TO FEMALE (JACK) UP TO 26.5GHZ RATED TO 2 WATT

SIZE A CAGE CODE 3FKR5 DRAWN BY PSR/NIVAS ITEM NO. FMAT7471-10 REV A

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

TOLERANCES:
 .X = +.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 <12 [305] ±.60 [15.24] = +.2 [5] / -0
 >12 [305] ≤.60 [15.24] = +.2 [5] / -0
 >60 [1524] ≤.120 [3048] = +.4 [10] / -0
 >120 [3048] ≤.300 [7620] = +.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b