

7 dB Fixed Attenuator SMP Male (Plug) to SMP Female (Jack) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 VSWR



**FMAT7470-7**

**Features**

- DC to 18 GHz Frequency Range
- SMP Connectorized Design
- Attenuation 7 dB  $\pm$ 0.8 dB
- Max Power 1 Watt (CW)
- Max VSWR of 1.35:1

**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 FMAT7470-7 is a 7 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 1 Watt. The versatile coaxial package uses SMP male to SMP female connectors.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		7		dB
Attenuation Accuracy		0.8		dB
VSWR			1.35:1	
Input Power, CW			1	Watt
average to 25°C ambient temperature, derated linearly to 0.5W @ 125°C.				
Input Power, Peak			100	Watts
5μs pulse, 1% duty cycle				

**Mechanical Specifications**

**Size**

- Length 0.835 in [21.21 mm]
- Width/Diameter 0.315 in [8 mm]
- Height 0.315 in [8 mm]
- Weight 0.01 lbs [4.54 g]
- Body Material and Plating Stainless Steel

**Configuration**

- Design Fixed, Bidirectional
- Package Style Connectorized Module

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### Connectors

Description	Connector 1	Connector 2
Type	SMP Male	SMP Female
Contact Material and Plating	Beryllium Copper, 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

7 dB Fixed Attenuator SMP Male (Plug) to SMP Female (Jack) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 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: [7 dB Fixed Attenuator SMP Male \(Plug\) to SMP Female \(Jack\) Up to 18 GHz Rated to 1 Watt, Stainless Steel Body, 1.35:1 VSWR FMAT7470-7](#)

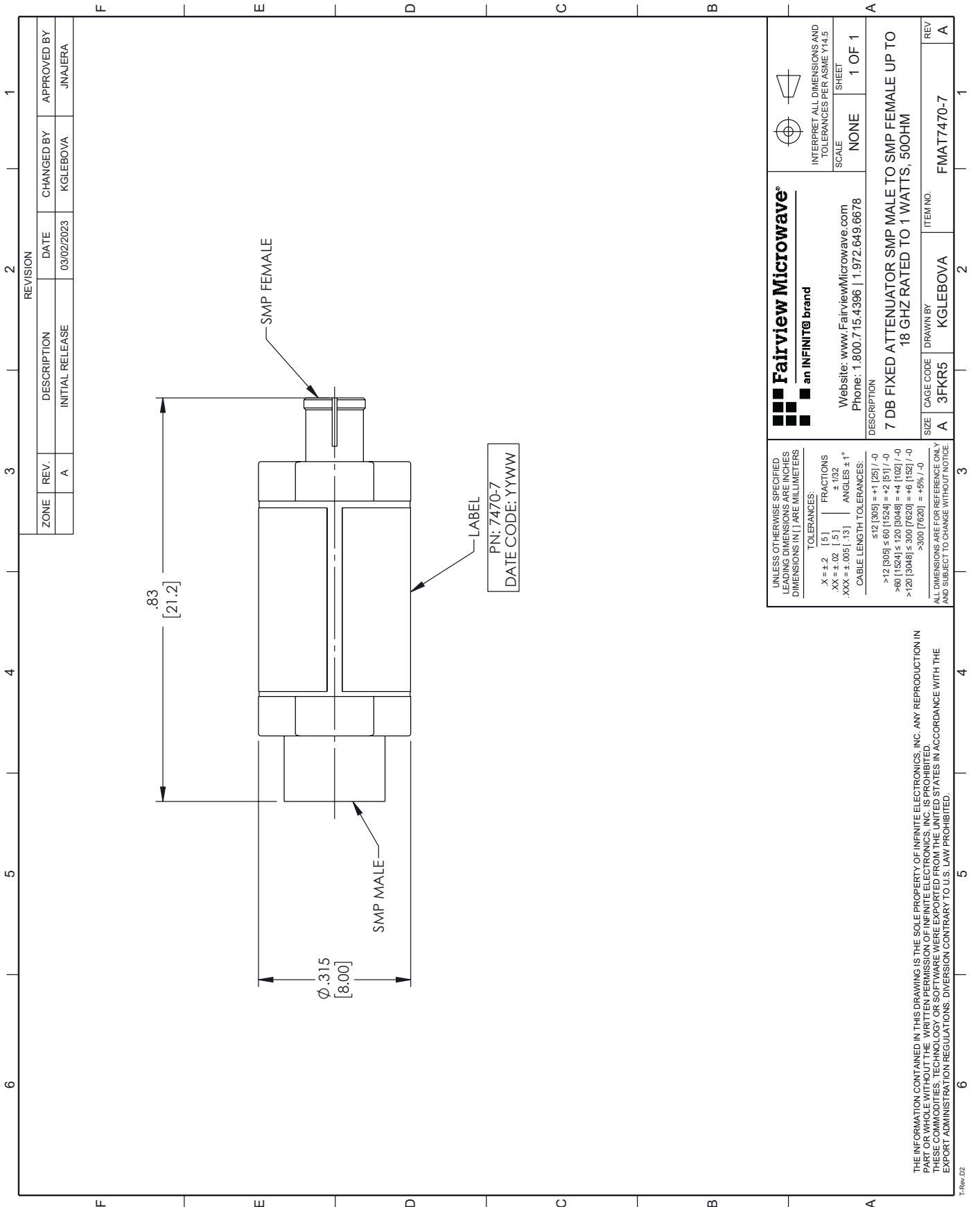
URL: <https://www.fairviewmicrowave.com/7db-fixed-attenuator-male-female-1-watt-fmat7470-7-p.aspx>

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# FMAT7470-7 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY
	A	INITIAL RELEASE	03/02/2023	KGLEBOVA
				JNAJERA

<p><b>Fairview Microwave</b> an INFINIT® brand</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
	<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a></p> <p>Phone: 1.800.715.4396   1.972.649.6678</p>	<p>DESCRIPTION</p> <p><b>7 DB FIXED ATTENUATOR SMP MALE TO SMP FEMALE UP TO 18 GHZ RATED TO 1 WATTS, 50OHM</b></p>
<p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: KGLEBOVA</p> <p>ITEM NO: FMAT7470-7</p>	<p>REV: A</p>

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

TOLERANCES:

X = ±.2 [5]      FRACTIONS ± 1/32

.XX = ±.02 [0.5]      ANGLES ± 1°

.XXX = ±.005 [0.13]      CABLE LENGTH TOLERANCES:

≤12 [305] = +1 [25] / -0

>12 [305] ≤ 60 [1524] = +2 [51] / -0

>60 [1524] ≤ 120 [3048] = +4 [102] / -0

>120 [3048] ≤ 300 [7620] = +8 [152] / -0

>300 [7620] = +8% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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