

Low PIM 30 dB Fixed Attenuator 4.3-10 Female (Jack)  
to 4.3-10 Female (Jack) 0.6 GHz to 6 GHz Rated  
to 200 Watts Anodized Aluminum 1.3:1 VSWR



## FMAT7485-30

### Features

- 0.6 to 6 GHz Frequency Range
- 4.3-10 Connectorized Design
- Attenuation 30 dB  $\pm$ 2 dB
- Max Power 200 Watt (CW)
- Typical VSWR of 1.3:1
- PIM rating -168 dBc typical

### Applications

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

### Description

Fairview Microwave carries a wide range of fixed attenuators with a broad selection of attenuation levels, frequency ranges, and power dissipation ranges. RF microwave attenuators (also known as RF pads) lower the amplitude of a signal (attenuate) a known amount and can be used in a wide variety of applications. These attenuator pads are used when a signal needs to be reduced to protect measurement equipment or other circuitry, to extend the range of power meters and amplifiers, and to impedance match 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 30 dB Fixed Attenuator FMAT7485-30 is rated to 200 Watts and operates from 0.6 to 6 GHz. The fixed attenuator offers 1.3:1 VSWR and low PIM (passive intermodulation) rating of -168 dBc typical. The versatile coaxial package uses 4.3-10 female to 4.3-10 female connectors.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.6		6	GHz
Impedance		50		Ohms
Nominal Attenuation		30		dB
Attenuation Accuracy		2		dB
VSWR		1.3:1		
Passive Intermodulation		-168	-160	dBc
2x43dBm				
Input Power, CW			200	Watts
Input Power, Peak			2	kWatts
8% duty cycle, 20us PW				

### Mechanical Specifications

#### Size

Length	6.69 in [169.93 mm]
Width/Diameter	5.12 in [130.05 mm]
Height	4.25 in [107.95 mm]
Weight	1.88 lbs [852.75 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

#### Configuration

Design	Fixed, Directional
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Design Type	Low PIM
Package Style	Connectorized

### Connectors

Description	Connector 1	Connector 2
Type	4.3-10 Female	4.3-10 Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

### Environmental Specifications

#### Temperature

Operating Range	-40 to +75 deg C
Storage Range	-50 to +85 deg C
Humidity	<95%
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6-Fc
Altitude	<5000m
Thermal Shock	IEC 60068 -2-14-Na

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

### Plotted and Other Data

Notes:

### Typical Performance Data

Low PIM 30 dB Fixed Attenuator 4.3-10 Female (Jack) to 4.3-10 Female (Jack) 0.6 GHz to 6 GHz Rated to 200 Watts Anodized Aluminum 1.3:1 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.

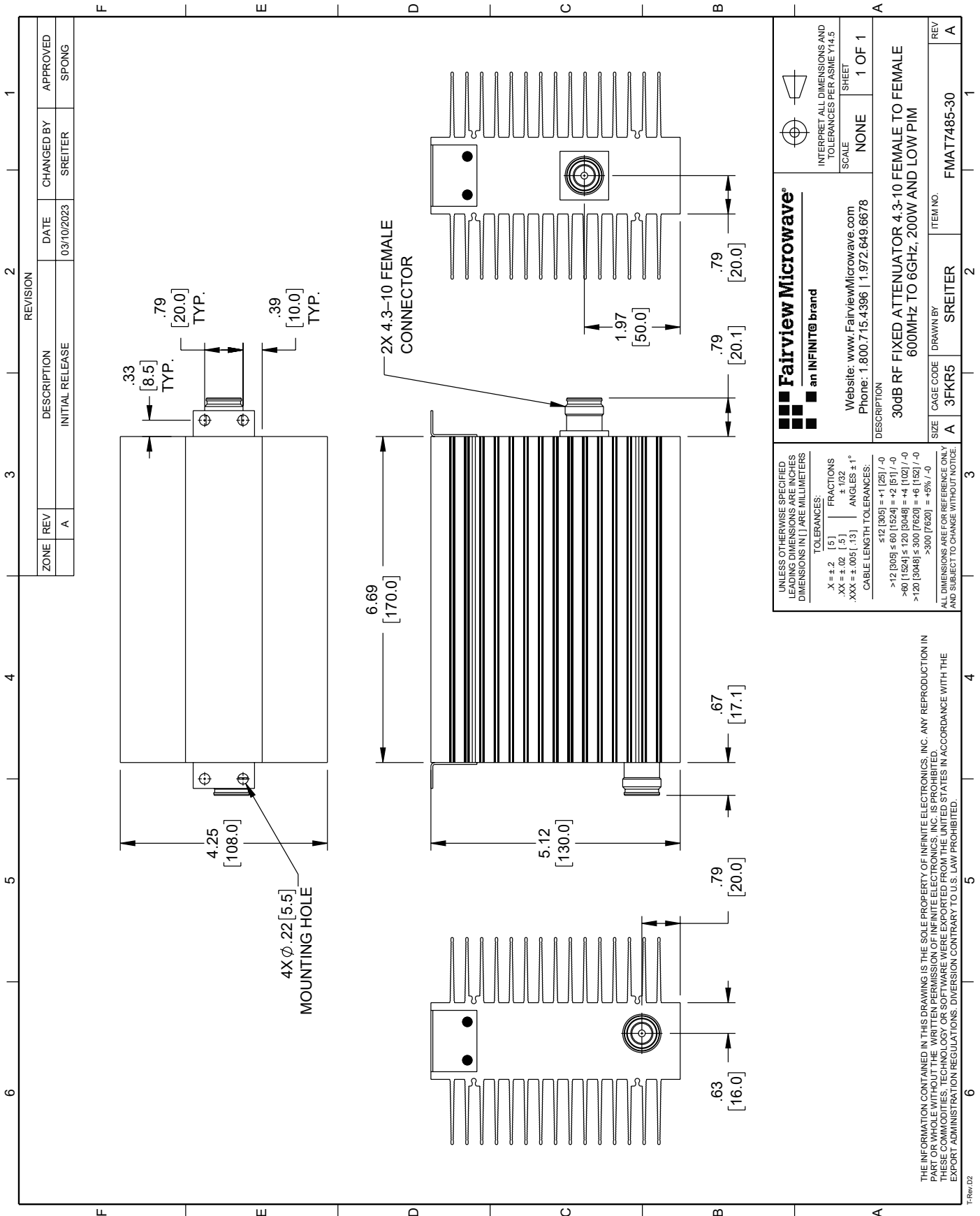
For additional information on this product, please click the following link: [Low PIM 30 dB Fixed Attenuator 4.3-10 Female \(Jack\) to 4.3-10 Female \(Jack\) 0.6 GHz to 6 GHz Rated to 200 Watts Anodized Aluminum 1.3:1 VSWR FMAT7485-30](#)

URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-4.3-10-female-4.3-10-female-200-watts-fmat7485-30-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

# FMAT7485-30 CAD Drawing

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<b>Fairview Microwave</b> an INFINIT@ brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		DESCRIPTION: 30dB RF FIXED ATTENUATOR 4.3-10 FEMALE TO FEMALE 600MHz TO 6GHz, 200W AND LOW PIM
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.	TOLERANCES: X = ±.2 (5) FRACTIONS ±.02 (.5) ANGLES ±1° .XX = ±.005 (.13) CABLE LENGTH TOLERANCES: <math>\le 12 [305]> = +.1 [25] / -0</math> <math>> 12 [305] \le 60 [1524] = +.2 [51] / -0</math> <math>> 60 [1524] \le 120 [3048] = +.4 [102] / -0</math> <math>> 120 [3048] \le 300 [7620] = +.8 [203] / -0</math> >300 [7620] = +.8% / -0	ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.
SIZE: A CAGE CODE: 3FKR5 DRAWN BY: SREITER	ITEM NO.: FMAT7485-30	REV: A

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