

20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 12.4 GHz Rated to 5 Watts, Brass Nickel Body, 1.35:1 VSWR



**FMAT7461-20**

**Features**

- DC to 12.4 GHz Frequency Range
- N Connectorized Design
- Attenuation 20 dB  $\pm$ 0.7 dB
- Max Power 5 Watts
- Max VSWR of 1.35:1

**Applications**

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems
- WIFI 6E
- 5G Cellular Bands

**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 FMAT7461-20 is a 20 dB Fixed Attenuator that operates from DC to 12.4 GHz and is rated to 5 Watts. The versatile coaxial package uses type N male to type N female connectors.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.7		dB
VSWR			1.35:1	
Input Power, CW			5	Watts
Derated linearly to 0.5W at 125°C				
Input Power, Peak			500	Watts
5 $\mu$ s pulse, 1% Duty Cycle				

**Mechanical Specifications**

**Size**

- Length 2 in [50.8 mm]
- Width/Diameter 0.79 in [20.07 mm]
- Height 0.79 in [20.07 mm]
- Weight 0.082 lbs [37.19 g]
- Body Material and Plating Brass, Nickel

**Configuration**

- Design Fixed, Bidirectional

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## FMAT7461-20

### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel	Brass, Nickel

### 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

20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 12.4 GHz Rated to 5 Watts, Brass Nickel 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: [20 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Up to 12.4 GHz Rated to 5 Watts, Brass Nickel Body, 1.35:1 VSWR FMAT7461-20](#)

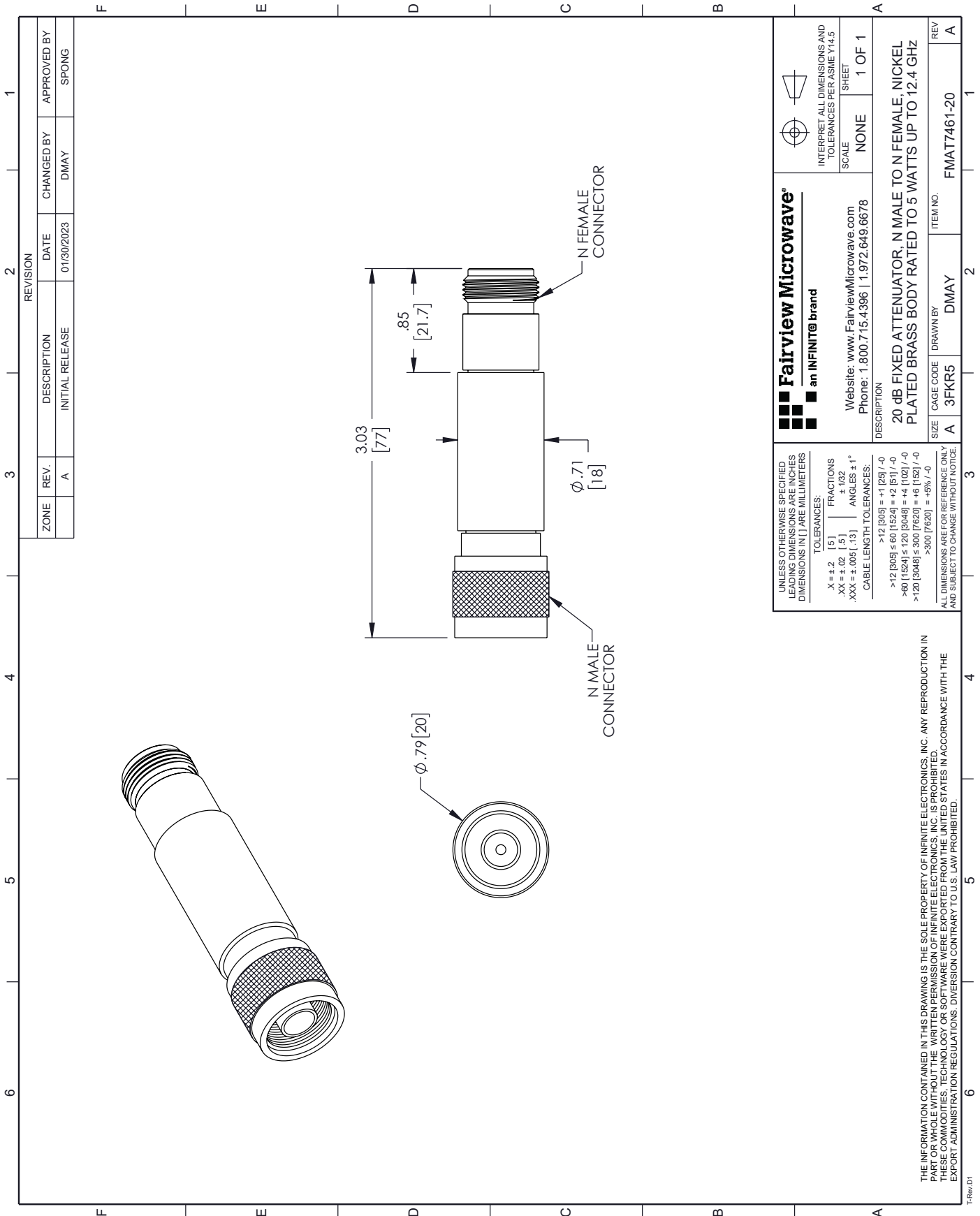
URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-5-watts-fmat7461-20-p.aspx>

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# FMAT7461-20 CAD Drawing

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**Fairview Microwave®**  
an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
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UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
X = ±.2 [5] | FRACTIONS ± 1/32  
.XX = ±.02 [1.5] | ANGLES ± 1°  
.XXX = ±.005 [1.3] | CABLE LENGTH TOLERANCES:  
>12 [305] = ±.1 [25] / -0  
>60 [1524] ≤ 60 [1524] = +.2 [5] / -0  
>120 [3048] ≤ 120 [3048] = +.4 [102] / -0  
>300 [7620] ≤ 300 [7620] = +.8 [20] / -0  
ALL DIMENSIONS ARE FOR REFERENCE ONLY  
AND SUBJECT TO CHANGE WITHOUT NOTICE

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

DESCRIPTION  
20 dB FIXED ATTENUATOR, N MALE TO N FEMALE, NICKEL PLATED BRASS BODY RATED TO 5 WATTS UP TO 12.4 GHz

SIZE A CAGE CODE 3FKR5 DRAWN BY DMAY ITEM NO. FMAT7461-20

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