

## 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

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 and is also RoHS compliant.

### Electrical Specifications

Description	Min	Typ	Max	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 Derated linearly to 0.5W at 125°C			5	Watts
Input Power, Peak 5 $\mu$ s pulse, 1% Duty Cycle			500	Watts

### Mechanical Specifications

Size	
Length	3.03 in [76.96 mm]
Width/Diameter	0.79 in [20.07 mm]
Weight	0.18 lbs [81.65 g]
Body Material and Plating	Brass, Nickel

### Configuration

Design	Fixed, Bidirectional
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### Connectors

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



### 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

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Environmental Specifications

### Temperature

Operating Range -55 to +125 deg C

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

## Plotted and Other Data

Notes:

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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