

## 30 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 FMAT7461-30 is a 30 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		30		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 μs 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
--------	----------------------

### 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 30 dB ±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

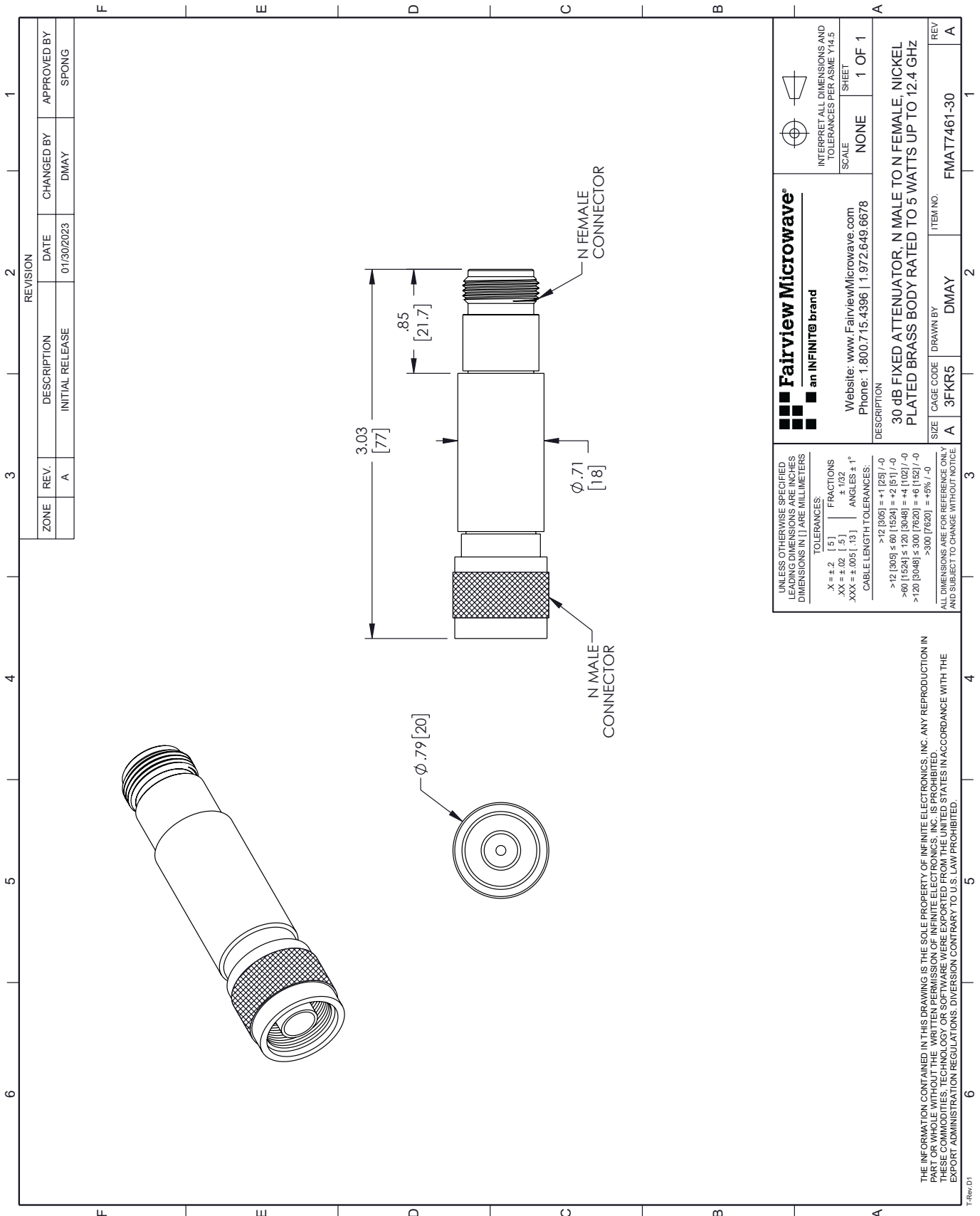
Notes:

30 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: [30 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 FMAT7461-30](#)

URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-n-male-n-female-5-watts-fmat7461-30-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.



REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	INITIAL RELEASE	
	A			SPONG

 <b>Fairview Microwave<sup>®</sup></b> an INFINIT <sup>®</sup> 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: <b>30 dB FIXED ATTENUATOR, N MALE TO N FEMALE, NICKEL PLATED BRASS BODY RATED TO 5 WATTS UP TO 12.4 GHz</b>	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FMAT7461-30

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

TOLERANCES:

.X = ± .2 [ 5 ]	FRACTIONS
.XX = ± .02 [ .5 ]	± 1/32
.XXX = ± .005 [ .13 ]	ANGLES ± 1°

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]	= +6 [152] / -0
>300 [7620]	= +5% / -0

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

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.