

30 dB RF Fixed Attenuator TNC Male (Plug) to TNC Female (Jack), DC to 3 GHz Rated to 2 Watt, Brass Body, 1.25:1 VSWR



**FMAT7609-30**

**Features**

- DC to 3 GHz Range
- Attenuation 30 ±1.5 dB
- 2 Watts (CW) Power
- VSWR <1.25:1

**Applications**

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

**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 attenuators 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 Attenuators FMAT7609-30 is rated to 2 Watts and operates from DC to 3 GHz. The versatile coaxial package uses TNC male to TNC female connectors.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Nominal Attenuation		30		dB
Attenuation Accuracy		1.5		dB
VSWR			1.25:1	
Input Power, CW			2	Watts

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 3				GHz
VSWR, Max	1.15:1	1.25:1				

**Mechanical Specifications**

**Size**

- Length 2.087 in [53.01 mm]
- Width/Diameter 0.63 in [16 mm]
- Height 0.63 in [16 mm]
- Weight 0.1 lbs [45.36 g]
- Body Material and Plating Brass, Copper-Tin-Zinc Alloy

**Configuration**

- Design Fixed, Bidirectional

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## FMAT7609-30

### Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Copper-Tin-Zinc Alloy	Brass, Copper-Tin-Zinc Alloy

### Environmental Specifications

#### Temperature

Operating Range -50 to +85 deg C

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

### Plotted and Other Data

Notes:

### Typical Performance Data

30 dB RF Fixed Attenuator TNC Male (Plug) to TNC Female (Jack), DC to 3 GHz Rated to 2 Watt, Brass Body, 1.25:1 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.

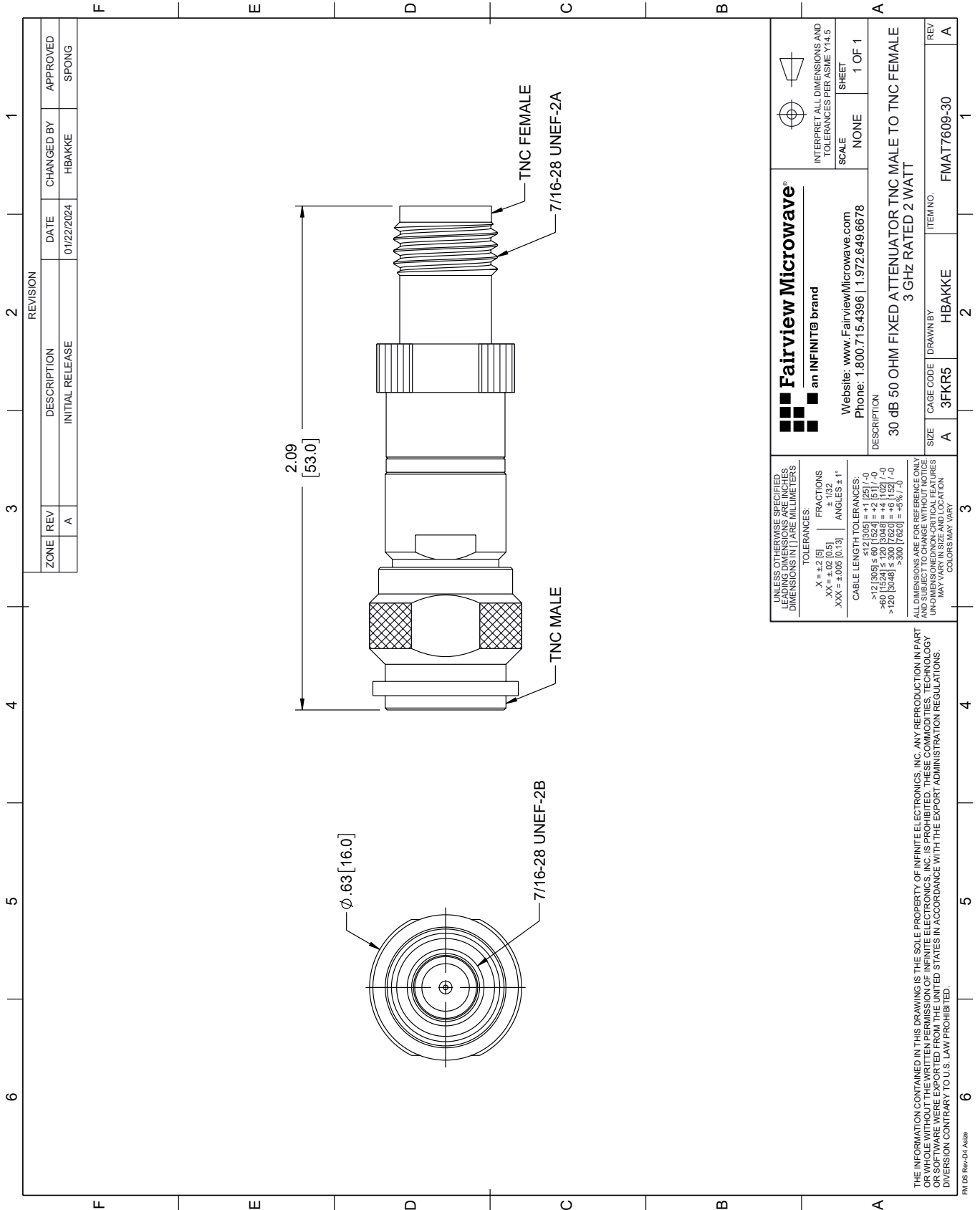
For additional information on this product, please click the following link: [30 dB RF Fixed Attenuator TNC Male \(Plug\) to TNC Female \(Jack\), DC to 3 GHz Rated to 2 Watt, Brass Body, 1.25:1 VSWR FMAT7609-30](#)

URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-tnc-male-tnc-female-2-watts-fmat7609-30-p.aspx>

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# FMAT7609-30 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	01/22/2024	HBAKKE	SPONG

**Fairview Microwave**  
an INFINIT® brand

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Phone: 1.800.715.4396 | 1.972.649.6678

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

DESCRIPTION: 30 dB 50 OHM FIXED ATTENUATOR TNC MALE TO TNC FEMALE 3 GHz RATED 2 WATT

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	HBAKKE	FMAT7609-30

REV: A

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

TOLERANCES:  
 .X = ±.2 [5] FRACTIONS ± 1/32  
 .XX = ±.02 [0.5] ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.125 [-0  
 >60 [1524] ≤ 120 [3048] = ±.102 [-0  
 >120 [3048] ≤ 300 [7620] = ±.08 [-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b