

20 dB Fixed Attenuator 75 Ohm BNC Male (Plug) to 75 Ohm BNC Female (Jack) Up to 4 GHz Rated to 2 Watts, Brass Tri-Metal Body, 1.35 VSWR



## FMAT7438-20

### Features

- DC to 4 GHz Frequency Range
- Attenuation 20 dB Typical
- Max Power 2 Watts (CW)
- VSWR < 1.35:1
- 75 Ohm Impedance

### Applications

- Wireless
- Video Signal Transmission
- Radar Systems
- Test and Measurement
- Commercial and Military Communication
- Avionics

### 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 FMAT7438-20 is a 20 dB Fixed Attenuator that operates from DC to 4 GHz and is rated to 2 Watts. The versatile coaxial package uses BNC male to BNC female connectors.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
Impedance		75		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		1		dB
VSWR			1.35:1	
Input Power, CW			2	Watts

### Mechanical Specifications

#### Size

Length	2.087 in [53.01 mm]
Width/Diameter	0.571 in [14.5 mm]
Height	0.571 in [14.5 mm]
Weight	0.05 lbs [22.68 g]
Body Material and Plating	Brass, Tri-Metal

#### Configuration

Design	Fixed
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### Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Female
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Coupling Nut Material and Plating	Stainless Steel	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

### 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 75 Ohm BNC Male (Plug) to 75 Ohm BNC Female (Jack) Up to 4 GHz Rated to 2 Watts, Brass Tri-Metal Body, 1.35 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 75 Ohm BNC Male \(Plug\) to 75 Ohm BNC Female \(Jack\) Up to 4 GHz Rated to 2 Watts, Brass Tri-Metal Body, 1.35 VSWR FMAT7438-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-bnc-male-bnc-female-2-watts-fmat7438-20-p.aspx>

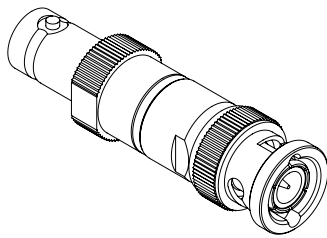
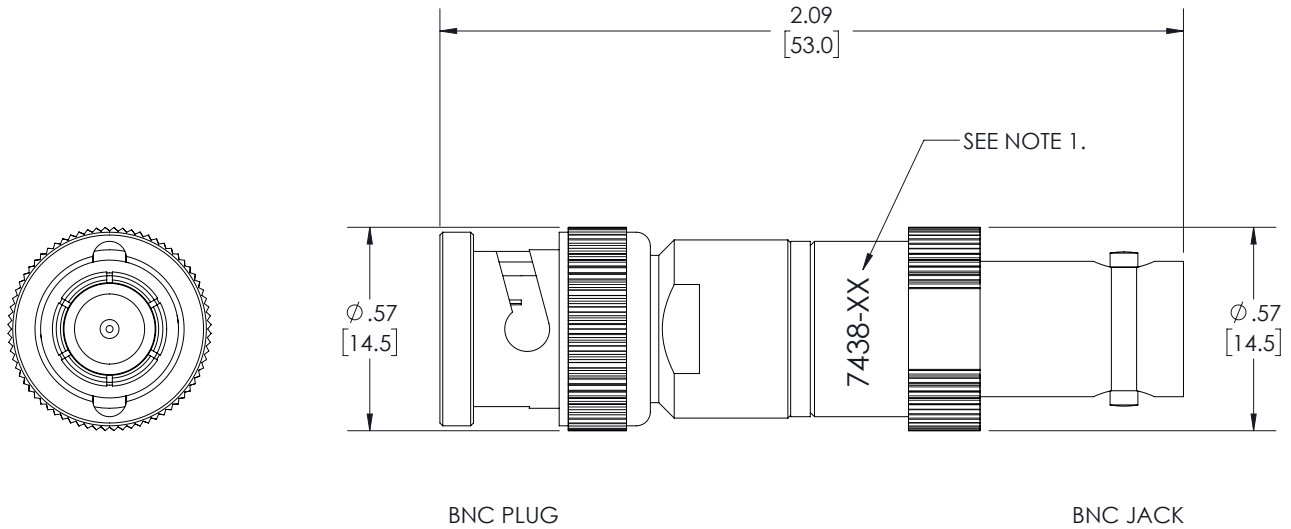
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# FMAT7438-20 CAD Drawing

20 dB Fixed Attenuator 75 Ohm BNC Male (Plug) to 75 Ohm BNC Female (Jack)

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/05/22	SPONG



**NOTES:**

- ITEM IS MARKED WITH PART NUMBER WHERE SHOWN.  
 "-XX" DENOTES THE ATTENUATION VALUE,  
 EXAMPLE: 7438-1 = 1dB, 7438-10 = 10dB, ETC.

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TITLE	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS			THIRD-ANGLE PROJECTION
	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.
	.X = ±.2 [5.08] FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0		SHEET 1 OF 1
	.XX = ±.02 [.51] ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0		SCALE N/A
	.XXX = ±.005 [.13]	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0		
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0		
		300 [7620] < L = +5%L / -0		
	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			
SIZE A	CAGE CODE 3FKR5	DRAWN BY AKRESOWSK	ITEM NO. FMAT7438	REV A

T-Rev.D