

20 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR

FMAT7511-20



Features

- DC to 50 GHz Range
- Attenuation 20 \pm 1.5 dB
- 5 Watts Average Input Power
- VSWR <1.45:1

Applications

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

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 (attenuate) a known amount. These attenuators 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 FMAT7511-20 is a 20 dB Fixed Attenuators that operates from DC to 50 GHz and is rated to 5 Watts. The versatile coaxial package uses 2.4mm male to 2.4mm female connectors.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 50 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 20 | | dB |
| VSWR | | | 1.45:1 | |
| Input Power, CW | | | 5 | Watts |
| Derated linearly to 0.5W @ 125°C | | | | |
| Input Power, Peak | | | 200 | Watts |
| 5μs pulse, 2.5% duty cycle | | | | |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---------------------------|----------|----|----|----|----|-------|
| Frequency Range | DC to 50 | | | | | GHz |
| Attenuation Accuracy, Typ | 1.5 | | | | | dB |

Mechanical Specifications

Size

| | |
|---------------------------|--------------------|
| Length | 1.49606 in [38 mm] |
| Width/Diameter | 1.14173 in [29 mm] |
| Height | 1.14173 in [29 mm] |
| Weight | 0.12 lbs [54.43 g] |
| Body Material and Plating | Aluminum |

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| <div>Configuration</div> | | |
|------------------------------|------------------------|------------------------|
| Design | Fixed, Bidirectional | |
| <div>Connectors</div> | | |
| Description | Connector 1 | Connector 2 |
| Type | 2.4mm Male | 2.4mm Female |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Material and Plating | Stainless Steel | Stainless Steel |

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 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 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 2.4mm Male \(Plug\) to 2.4mm Female \(Jack\) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR FMAT7511-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-2.4mm-male-2.4mm-female-5-watts-fmat7511-20-p.aspx>

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FMAT7511-20 CAD Drawing

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