### Bulkhead

## Adapter 2.4 mm-F to 2.4 mm-F

## VFPM-VF+

50 $\Omega$  DC to 50 GHz

## **The Big Deal**

- Ultra-wideband, DC-50 GHz
- Flat response
- Low insertion loss, 0.11 dB
- Excellent VSWR, 1.04:1





CASE STYLE: DJ3008

### **Product Overview**

Mini-Circuits' VFPM-VF+ is a wideband bulkhead adapter supporting a wide range of applications from DC to 50 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The VFPM-VF+ features passivated stainless steel construction and measures only 0.77" in length.

## **Key Features**

| Feature  | Advantages   |  |  |  |
|--|--|--|--|--|
| Wideband, DC to 50 GHz                               | Wide frequency range provides application flexibility and makes this model ideal for broad band and multi-band use.    |  |  |  |
| Excellent VSWR, 1.04:1                               | Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.            |  |  |  |
| Low insertion loss, 0.11 dB                          | Provides excellent signal power transmission from input to output.   |  |  |  |
| Passivated stainless steel construction.             | Stands up to wear and tear in demanding environments and provides excellent reliability.                               |  |  |  |
| Very wide operating temperature range, -55 to +100°C | Withstands extreme operating conditions and is suitable for use near high power componentry where heat rise is common. |  |  |  |

#### Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.ninicircuits.com/MCLStore/terms.jsp

# Adapter 2.4 mm-F to 2.4 mm-F

#### DC to 50 GHz $50\Omega$

#### **Maximum Ratings**

**Operating Temperature** -55°C to 100°C -55°C to 100°C Storage Temperature

Permanent damage may occur if any of these limits are exceeded.

#### **Features**

- flat response
- excellent VSWR, 1.04 typ.
- low cost adapters, available from stock
- stainless steel body, passivated

#### **Applications**

• interconnection of RF cable and equipment

## VFPM-VF+





Generic photo used for illustration purposes only

CASE STYLE: DJ3008

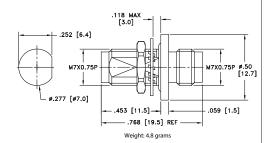
Connectors Model 2.4mm-Female VFPM-VF+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

#### **Outline Dimensions**

inches [mm]

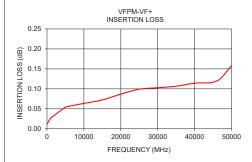


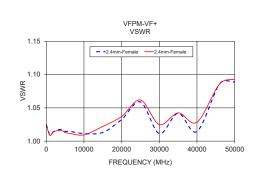
#### Electrical Specifications at 25°C

| Parameter       | Condition (GHz) | Min. | Тур. | Max. | Units |  |
|-----------------|-----------------|------|------|------|-------|--|
| Frequency Range |                 | DC   |      | 50   | GHz   |  |
|                 | DC-10           |      | 0.05 | 0.2  | dB    |  |
| Insertion Loss  | 10-20           |      | 0.08 | 0.2  |       |  |
| Insertion Loss  | 20-40           |      | 0.11 | 0.2  |       |  |
|                 | 40-50           |      | 0.13 | 0.25 |       |  |
|                 | DC-10           |      | 1.01 | 1.2  |       |  |
| VSWR            | 10-20           |      | 1.01 | 1.2  | :1    |  |
| VSWA            | 20-40           |      | 1.04 | 1.2  | .!    |  |
|                 | 40-50           |      | 1.04 | 1.2  |       |  |

#### **Typical Performance Data**

| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR<br>(:1) |          |  |
|--------------------|------------------------|--------------|----------|--|
|                    |                        | 2.4 mm-F     | 2.4 mm-F |  |
| 10                 | 0.01                   | 1.02         | 1.02     |  |
| 100                | 0.01                   | 1.00         | 1.00     |  |
| 500                | 0.02                   | 1.01         | 1.01     |  |
| 2000               | 0.03                   | 1.01         | 1.01     |  |
| 4000               | 0.05                   | 1.02         | 1.02     |  |
| 6000               | 0.06                   | 1.01         | 1.01     |  |
| 10000              | 0.06                   | 1.01         | 1.01     |  |
| 15000              | 0.07                   | 1.01         | 1.02     |  |
| 20000              | 0.09                   | 1.03         | 1.04     |  |
| 25000              | 0.10                   | 1.06         | 1.06     |  |
| 30000              | 0.10                   | 1.01         | 1.02     |  |
| 35000              | 0.11                   | 1.04         | 1.04     |  |
| 40000              | 0.11                   | 1.01         | 1.03     |  |
| 46000              | 0.12                   | 1.09         | 1.09     |  |
| 50000              | 0.16                   | 1.09         | 1.09     |  |





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