



# THE DATASHEET OF NF-SF50+

Coaxial

# Adapter, N-FEM to SMA-FEM

50Ω

DC to 18 GHz

NF-SF50+



Generic photo used for illustration purposes only

CASE STYLE: DJ827

| Connectors     | Model                     |
|----------------|---------------------------|
| Conn1<br>N-FEM | Conn2<br>SMA-FEM NF-SF50+ |

**+RoHS Compliant**

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

## Maximum Ratings

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Operating Temperature                                           | -55°C to 100°C |
| Storage Temperature                                             | -55°C to 100°C |
| Permanent damage may occur if any of these limits are exceeded. |                |

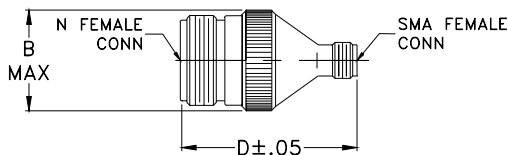
## Features

- flat response
- excellent VSWR
- passivated stainless steel
- low cost adapters, available from stock

## Applications

- interconnection of RF cables and equipment

## Outline Drawing



## Outline Dimensions (inch/mm)

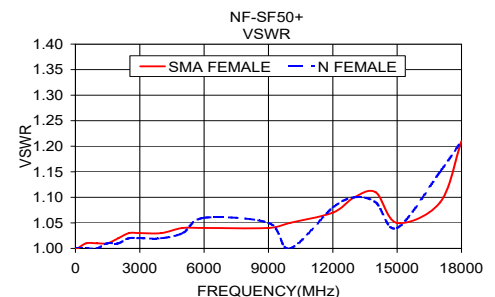
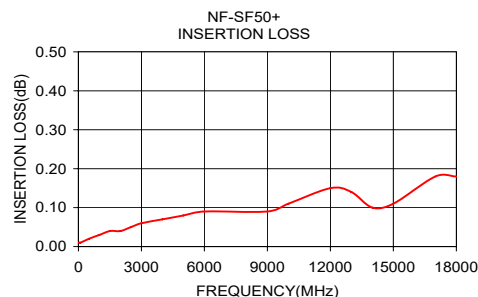
| A  | B     | C  | D     | E  | wt    |
|----|-------|----|-------|----|-------|
| -- | .70   | -- | 1.23  | -- | grams |
| -- | 17.78 | -- | 31.24 | -- | 26.0  |

## Electrical Specifications $T_{AMB}=25^{\circ}\text{C}$

| FREQUENCY (GHz) | INSERTION LOSS (dB) | VSWR (:1) Max. |             |           |
|-----------------|---------------------|----------------|-------------|-----------|
|                 |                     | DC-8 GHz       | DC-12.4 GHz | DC-18 GHz |
| $f_L-f_U$       | Typ.                |                |             |           |
| DC-18           | 0.1                 | 1.15           | 1.20        | 1.25      |

## Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |         |
|-----------------|---------------------|-----------|---------|
|                 |                     | N-FEM     | SMA-FEM |
| 10.00           | 0.01                | 1.00      | 1.00    |
| 50.00           | 0.01                | 1.00      | 1.00    |
| 100.00          | 0.01                | 1.00      | 1.00    |
| 500.00          | 0.02                | 1.00      | 1.01    |
| 1000.00         | 0.03                | 1.00      | 1.01    |
| 1500.00         | 0.04                | 1.01      | 1.01    |
| 2000.00         | 0.04                | 1.01      | 1.02    |
| 2500.00         | 0.05                | 1.02      | 1.03    |
| 3000.00         | 0.06                | 1.02      | 1.03    |
| 4000.00         | 0.07                | 1.02      | 1.03    |
| 5000.00         | 0.08                | 1.03      | 1.04    |
| 6000.00         | 0.09                | 1.06      | 1.04    |
| 9000.00         | 0.09                | 1.05      | 1.04    |
| 10000.00        | 0.11                | 1.00      | 1.05    |
| 12000.00        | 0.15                | 1.08      | 1.07    |
| 13000.00        | 0.14                | 1.10      | 1.10    |
| 14000.00        | 0.10                | 1.09      | 1.11    |
| 15000.00        | 0.11                | 1.04      | 1.05    |
| 17000.00        | 0.18                | 1.15      | 1.09    |
| 18000.00        | 0.18                | 1.21      | 1.21    |



## 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.  
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