# Adapter N-Female to SMA-Male

NFFL-SM50+

DC to 18 GHz  $50\Omega$ 

## **The Big Deal**

- Ultra-wideband, DC-18 GHz
- Low insertion loss, 0.14 dB typ.
- Excellent VSWR, 1.17:1 typ.





CASE STYLE: DJ1808-1

### **Product Overview**

Mini-Circuits' NFFL-SM50+ is a N-Female to SMA-Male adapter supporting a wide range of applications from DC to 18 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The NFFL-SM50+ features tri-metal plated brass housing and Gold-plated berillium copper construction center contact.

# **Key Features**

Feature	Advantages		
Wideband, DC to 18 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.		
Excellent VSWR • 1.17:1 typ.	Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.		
Low insertion loss • 0.14 dB typ.	Provides excellent signal power transmission from input to output.		
Tri-metal plated brass housing and Gold-plated berillium copper center contact	Stands up to wear and tear in demanding environments and provides excellent reliability.		
Very wide operating temperature range, -45 to +100°C	Withstands extreme operating conditions and is suitable for use near high power componentry where heat rise is common.		

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

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# NFFL-SM50+

#### DC to 18 GHz $50\Omega$

#### **Maximum Ratings**

**Operating Temperature** -45°C to 100°C -45°C to 100°C Storage Temperature Permanent damage may occur if any of these limits are exceeded.

#### **Features**

- flat response
- excellent VSWR, 1.17:1 typ.
- four hole flange mount

#### **Applications**

- interconnection of RF cable and equipment
- instrumentation





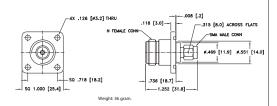
CASE STYLE: DJ1808-1

Connectors		Model	
Conn1	Conn2		
N-Female	SMA-Male	NFFL-SM50+	

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

### **Outline Dimensions**

inches [mm]

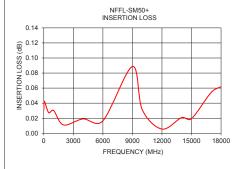


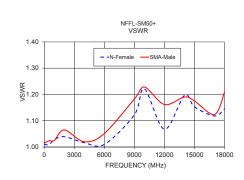
#### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Units
Frequency Range		DC		18	GHz
Insertion Loss	DC - 18	_	0.14	_	dB
	DC - 8	_	1.05	1.30	
VSWR	8 - 12	_	1.19	1.30	:1
	12 - 18	_	1.17	1.30	

#### **Typical Performance Data**

Frequency (MHz)		VSWR (:1)		
		N-Female	SMA-Male	
10	0.03	1.01	1.01	
50	0.04	1.01	1.02	
500	0.03	1.01	1.02	
1000	0.03	1.03	1.02	
2000	0.01	1.04	1.06	
4000	0.02	1.02	1.02	
6000	0.02	1.01	1.05	
9000	0.09	1.12	1.18	
10000	0.03	1.22	1.23	
12000	0.01	1.07	1.16	
14000	0.02	1.20	1.19	
15000	0.02	1.15	1.18	
17000	0.05	1.12	1.12	
18000	0.06	1.15	1.21	





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