

**THE BIG DEAL**

- Wideband, DC-9 GHz
- Low Insertion Loss, 0.05 dB typ. at 6 GHz
- Excellent VSWR, 1.11:1 typ. at 6 GHz



Generic photo used for illustration purposes only

Model No.	NFFL-NF50+
Case Style	DJ1808-3
Connectors	N- Female to N- Female

+RoHS CompliantThe +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications**APPLICATIONS**

- Interconnection of RF cable and equipment
- Instrumentation
- Rack mount equipment

PRODUCT OVERVIEW

Mini-Circuits' NFFL-NF50+ is a N-Female to N-Female panel mount adapter supporting a wide range of applications from DC to 9 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The NFFL-NF50+ features passivated stainless steel body and Gold-plated beryllium copper construction center contact.

KEY FEATURES

Feature	Advantages
Wideband, DC to 9 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Excellent VSWR • 1.11:1 typ. at 6 GHz	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.
Low Insertion Loss • 0.05 dB at 6 GHz	Provides excellent signal power transmission from input to output.
Panel Mount	Enables use in rack mount equipment
Passivated stainless steel body and Gold-plated beryllium copper center contact	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 or in extreme weather conditions.



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COAXIAL

Adapter

NFFL-NF50+

50Ω DC to 9 GHz N-Female to N-Female Panel Mount

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		9	GHz
Insertion Loss	DC - 9	—	0.05	—	dB
VSWR	DC - 6	—	1.06	1.15	:1
	6 - 9	—	1.08	1.20	

ABSOLUTE MAXIMUM RATINGS

Parameter	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.





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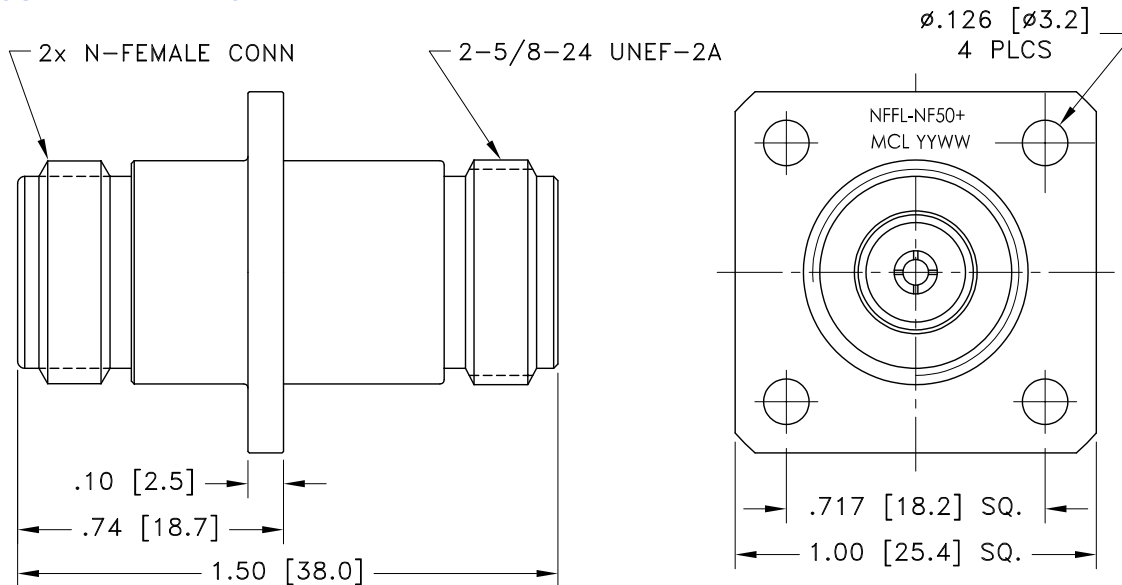
Adapter

NFFL-NF50+

Mini-Circuits

50Ω DC to 9 GHz N-Female to N-Female Panel Mount

OUTLINE DRAWING



Weight: 50 grams

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015



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Adapter

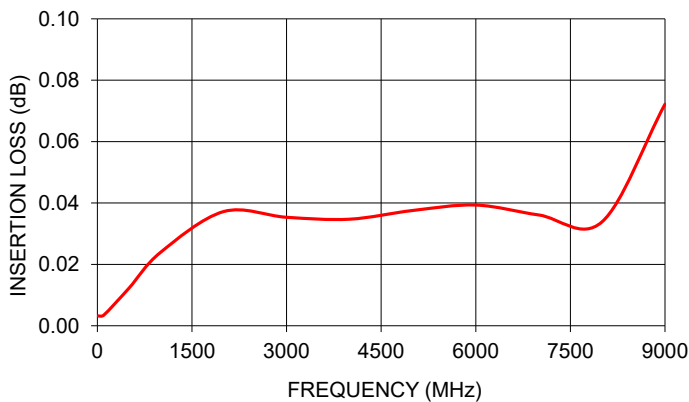
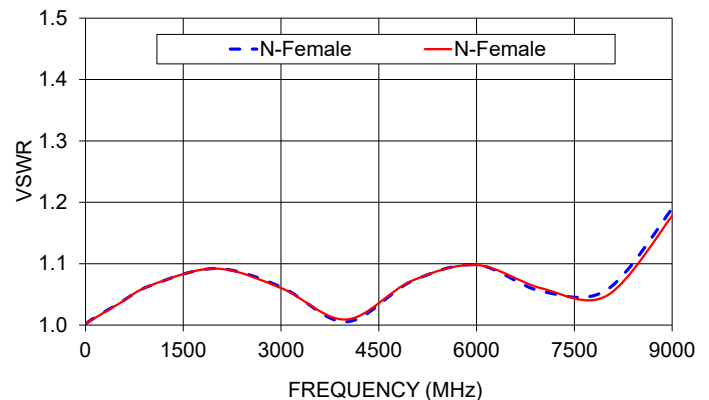
NFFL-NF50+

Mini-Circuits

50Ω DC to 9 GHz N-Female to N-Female Panel Mount

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N- Female	N-Female
10	0.00	1.00	1.00
100	0.00	1.01	1.01
500	0.01	1.03	1.03
1000	0.02	1.06	1.06
2000	0.04	1.09	1.09
3000	0.04	1.06	1.06
4000	0.03	1.01	1.01
5000	0.04	1.07	1.07
6000	0.04	1.10	1.10
7000	0.04	1.05	1.06
8000	0.03	1.06	1.05
9000	0.07	1.19	1.18

NFFL-NF50+
INSERTION LOSSNFFL-NF50+
VSWR

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.minicircuits.com/terms/viewterm.html



Adapter, N Female to N Female

NFFL-NF50+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-FEMALE 1 VSWR (:1)	N-FEMALE 2 VSWR (:1)
10	0.000	1.00	1.00
100	0.002	1.01	1.01
500	0.013	1.04	1.04
1000	0.024	1.07	1.07
1500	0.034	1.09	1.09
2000	0.041	1.09	1.09
2500	0.043	1.08	1.08
3000	0.044	1.06	1.06
3500	0.044	1.03	1.03
4000	0.048	1.01	1.01
4500	0.055	1.04	1.04
5000	0.061	1.08	1.08
5500	0.058	1.10	1.10
6000	0.050	1.11	1.11
6500	0.041	1.09	1.09
7000	0.033	1.06	1.06
7500	0.030	1.02	1.02
8000	0.034	1.07	1.07
8500	0.058	1.13	1.13
9000	0.086	1.19	1.19
9500	0.089	1.25	1.25
10000	0.098	1.28	1.28
10500	0.099	1.27	1.27
11000	0.082	1.23	1.23
11500	0.057	1.14	1.14
12000	0.044	1.05	1.05
12500	0.047	1.10	1.10
13000	0.084	1.22	1.22
13500	0.145	1.35	1.35
14000	0.204	1.46	1.46
14500	0.243	1.51	1.51
15000	0.238	1.51	1.51
15500	0.205	1.45	1.45
16000	0.148	1.35	1.35
16500	0.098	1.22	1.22
17000	0.064	1.10	1.10
17500	0.063	1.04	1.04
18000	0.084	1.16	1.16



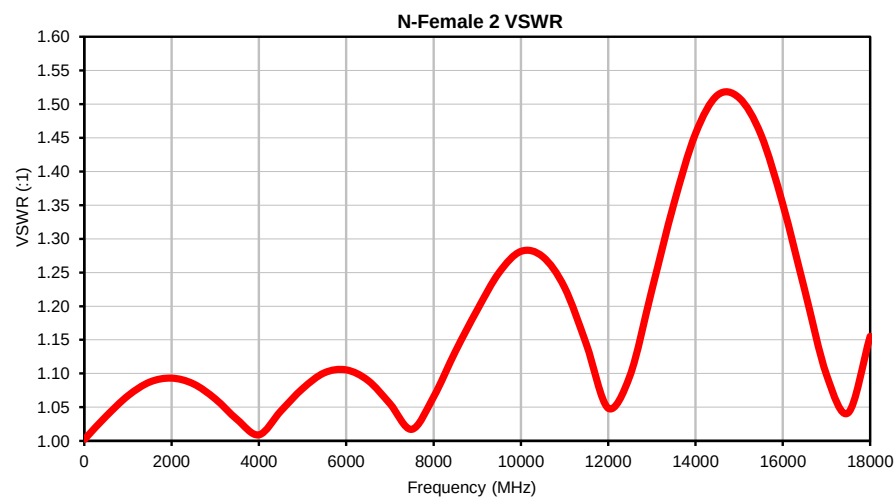
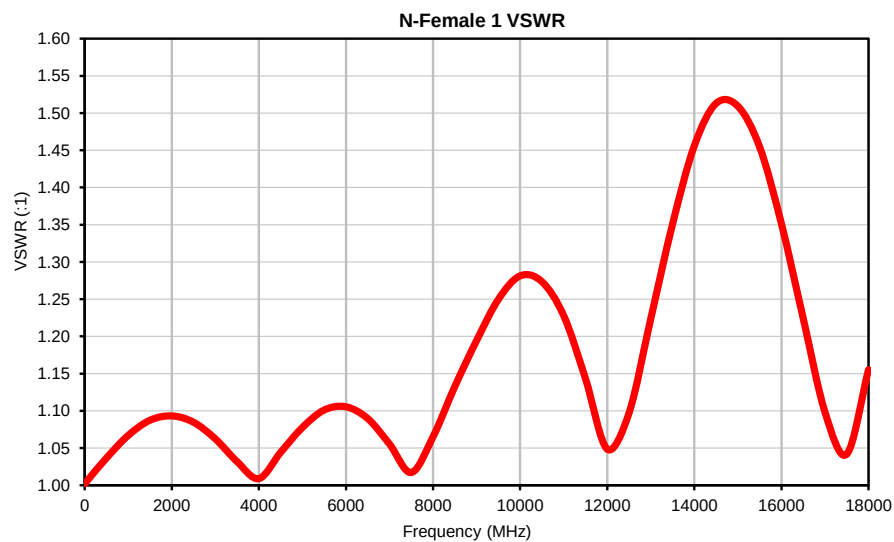
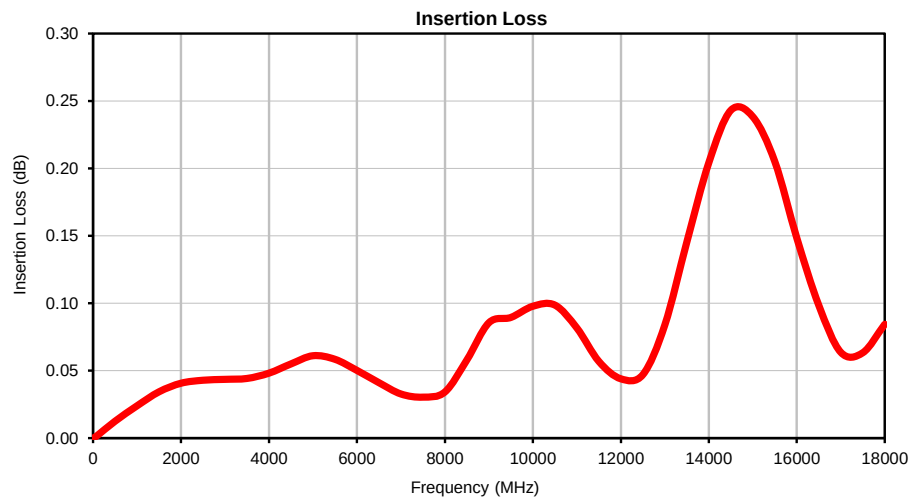
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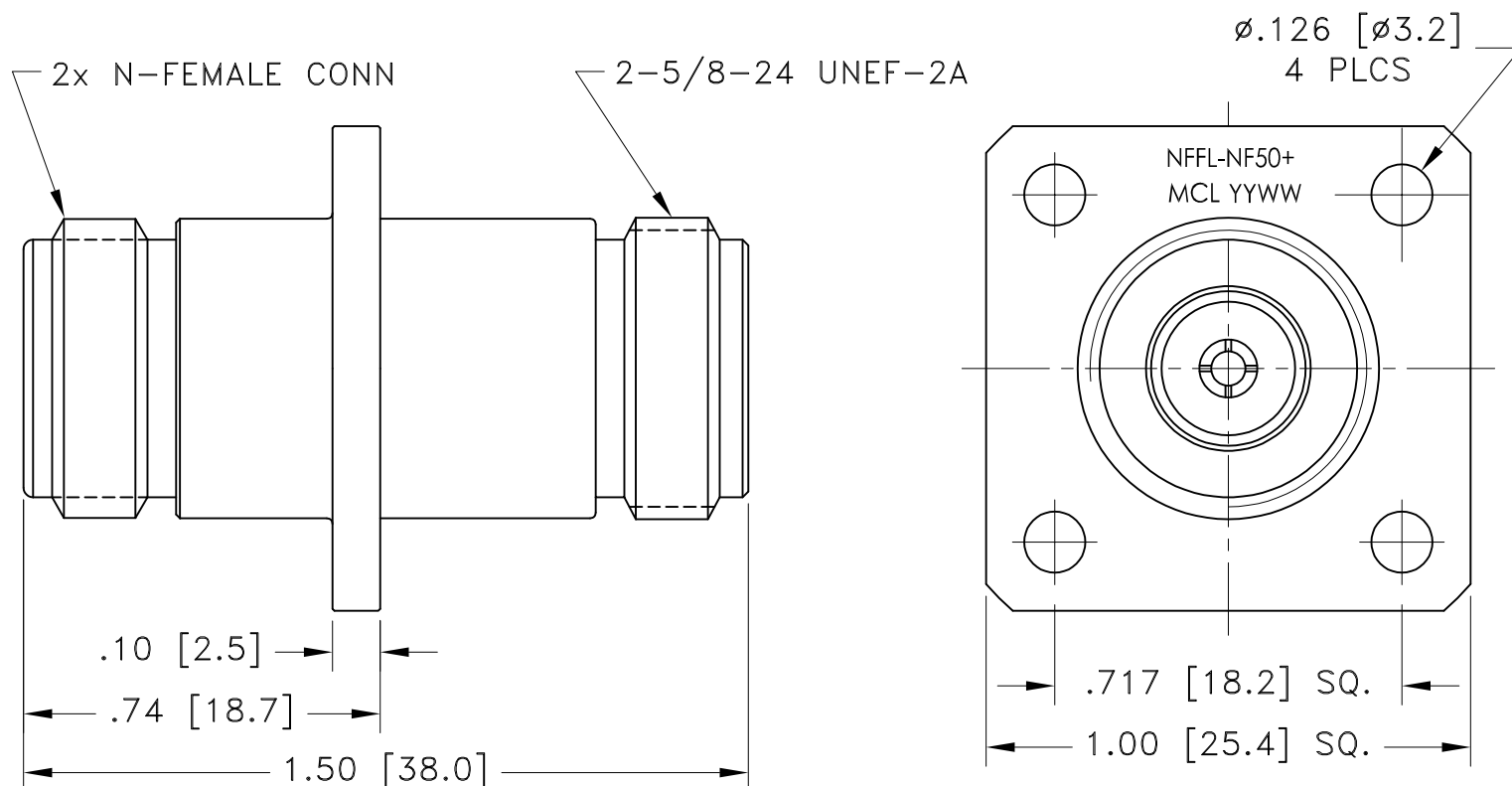


IF/RF MICROWAVE COMPONENTS

REV. OR
NFFL-NF50+
6/11/2020
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Typical Performance Curves





Weight: 50 grams

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

Notes:

1. Case material: Stainless Steel.
2. Finish: Passivation.



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The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100° C or -55° to 85° C or -45° to 100° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 5 cycles	MIL-STD-202, Method 107, Condition B except over -55° to 100°C
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12
Drop Test	1 meter height, 5 times	