



COAXIAL

# Adapter

## NF-NMR50+

50Ω DC to 6 GHz Right Angle N-Female to N-Male

### THE BIG DEAL

- Low insertion loss, 0.10 dB typ. up to 6 GHz
- Excellent VSWR, 1.04 typ. up to 6 GHz
- Low cost adapters, available from stock
- Passivated stainless steel body and gold-plated beryllium copper center connector



Generic photo used for illustration purposes only

Model No.	NF-NMR50+
Case Style	DJ2575
Connectors	Right Angle N- Female to N- Male

### +RoHS Compliant

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

### APPLICATIONS

- Interconnection of RF cables and equipment
- Rack mounted test system

### PRODUCT OVERVIEW

Mini-Circuits' NF-NMR50+ is a right-angle N-Female to N-Male adapter supporting a wide range of applications from DC to 6 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The NF-NMR50+ features passivated stainless steel body, nickel plated brass housing and Gold-plated beryllium copper center contact.

### KEY FEATURES

Feature	Advantages
Wideband, DC to 6 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Excellent VSWR, 1.04:1 typ. up to 6 GHz	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.
Low insertion loss, 0.10 dB typ. up to 6 GHz	Provides excellent signal power transmission from input to output.
Passivated stainless steel body and Gold-plated beryllium copper construction center contact	Stands up to wear and tear in demanding environments and provides excellent reliability.
Wide operating temperature range, -55 to +100 °C	Withstands tough operating conditions and is suitable for use near high power componentry where heat rise is common.

REV. A  
ECO-016681  
NF-NMR50+  
MCL NY  
230130





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### ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		6	GHz
Insertion Loss	DC - 2	—	0.04	0.20	dB
	2 - 4	—	0.06	0.20	
	4 - 6	—	0.07	0.20	
VSWR	DC - 6	—	1.02	1.20	:1

### 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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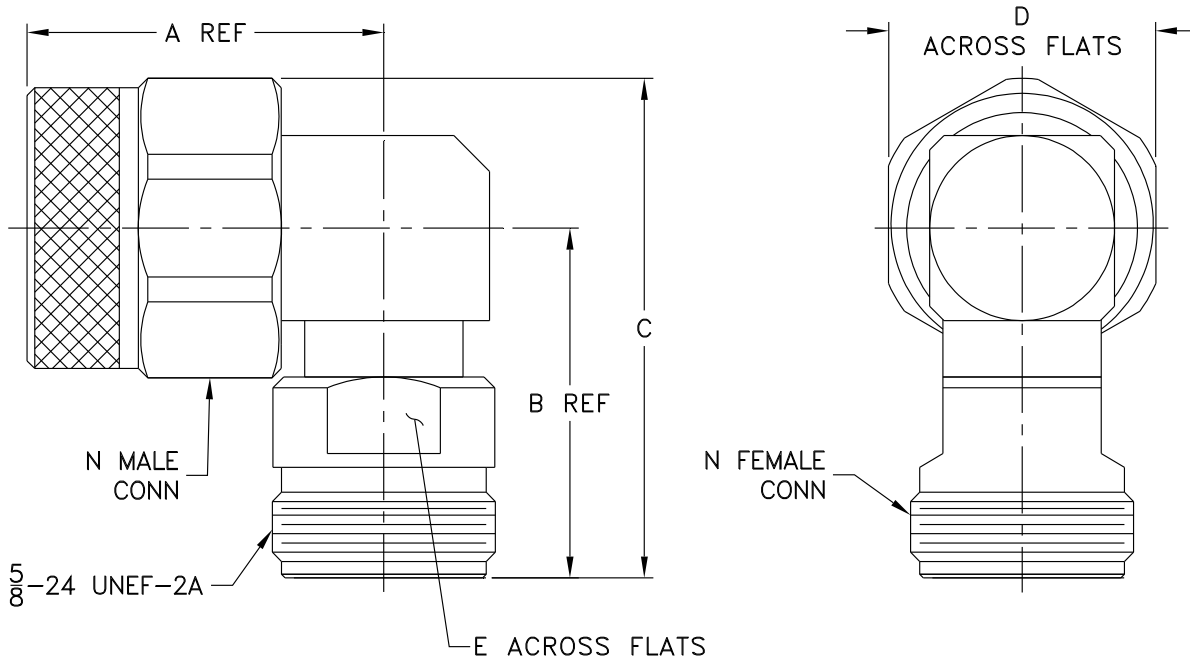
# Adapter

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50Ω DC to 6 GHz Right Angle N-Female to N-Male

### OUTLINE DRAWING



### OUTLINE DIMENSIONS (Inch/mm)

A	B	C	D	E	wt
1.00	0.98	1.400	0.748	.472	grams
25.40	24.89	35.54	19.00	12.00	56.3



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# Adapter

## NF-NMR50+

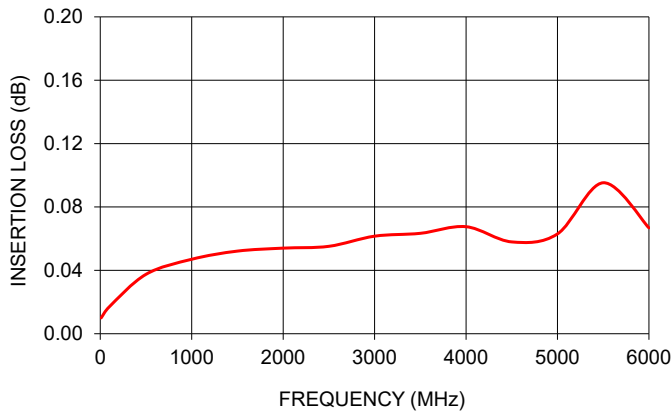
Mini-Circuits

50Ω DC to 6 GHz Right Angle N-Female to N-Male

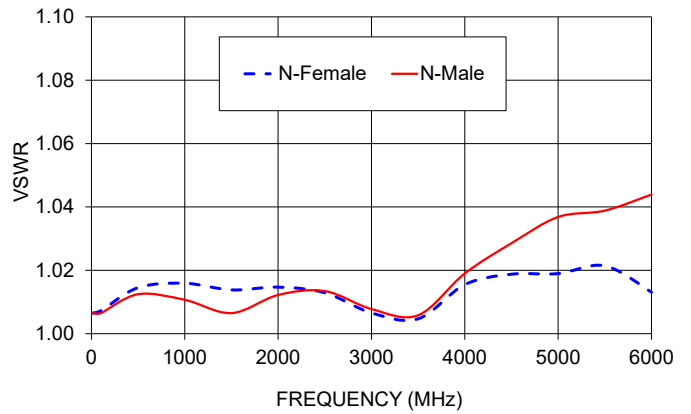
### TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N-Female	N-Male
10	0.01	1.01	1.01
100	0.02	1.01	1.01
500	0.04	1.01	1.01
1000	0.05	1.02	1.01
1500	0.05	1.01	1.01
2000	0.05	1.01	1.01
2500	0.06	1.01	1.01
3000	0.06	1.01	1.01
3500	0.06	1.00	1.01
4000	0.07	1.02	1.02
4500	0.06	1.02	1.03
5000	0.06	1.02	1.04
5500	0.10	1.02	1.04
6000	0.07	1.01	1.04

NF-NMR50+  
INSERTION LOSS



NF-NMR50+  
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](http://www.minicircuits.com/terms/viewterm.html)

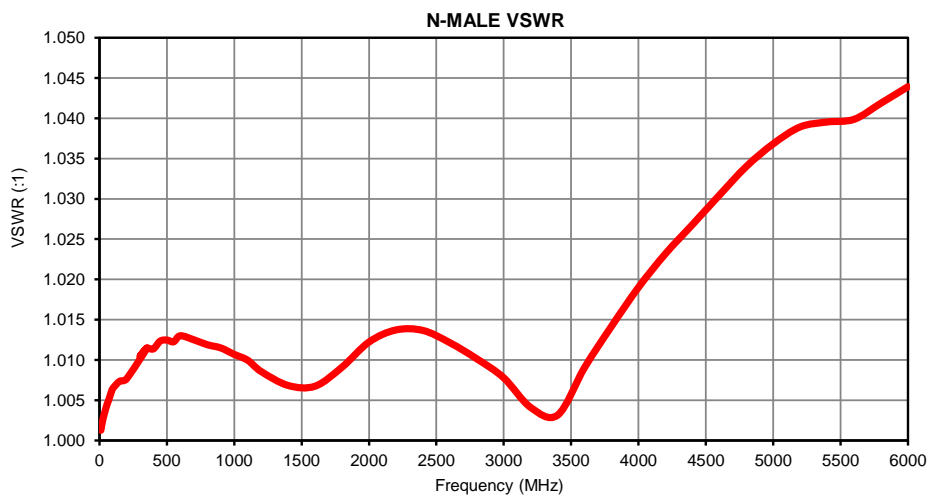
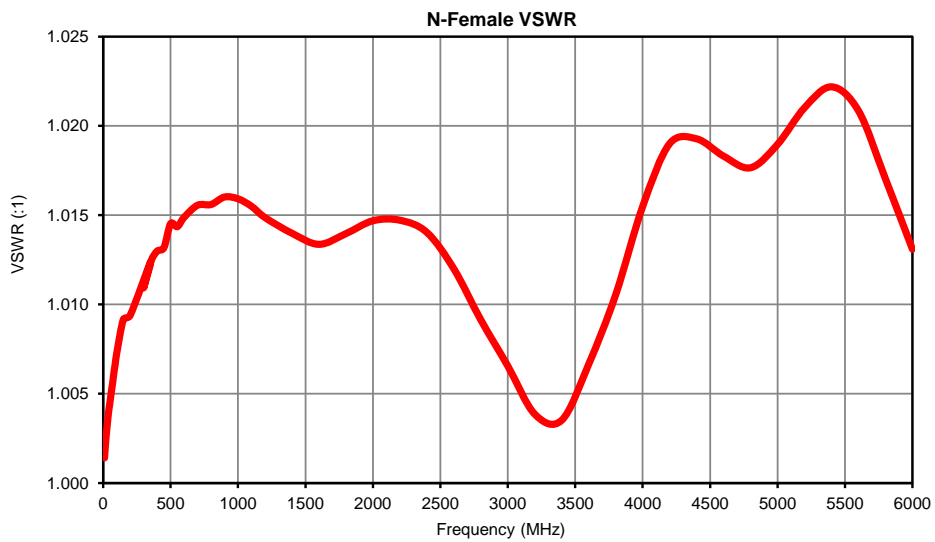
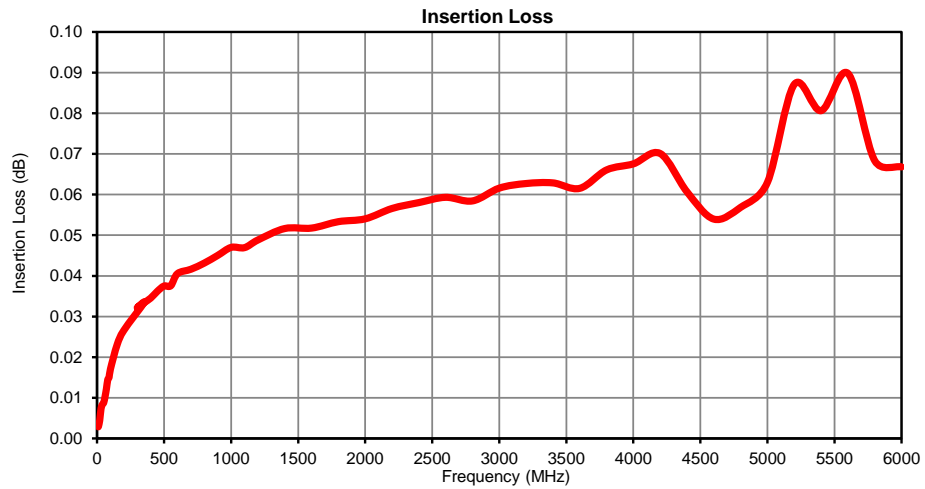


# Right Angle Adapter, N-Female to N-Male **NF-NMR50+**

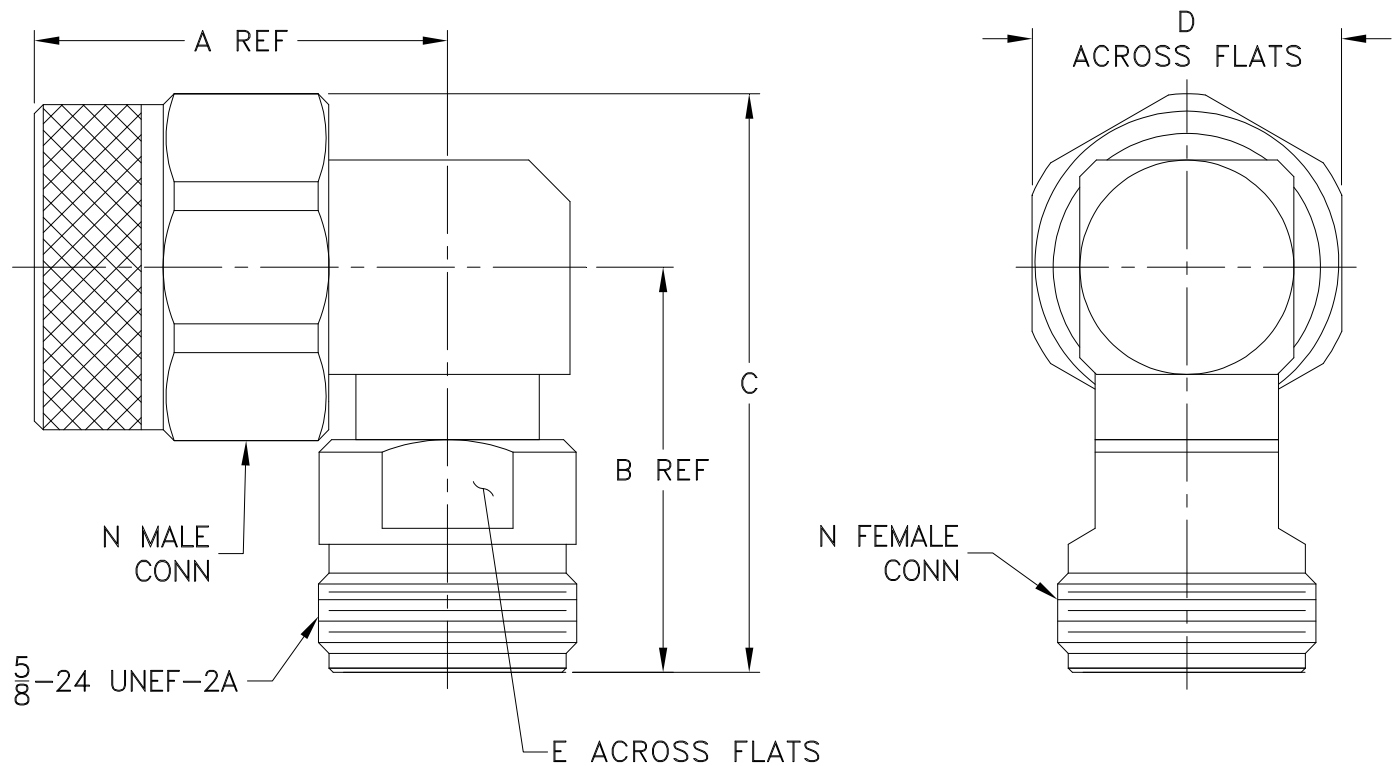
## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-FEMALE VSWR (:1)	N-MALE VSWR (:1)
10	0.003	1.00	1.00
20	0.004	1.00	1.00
30	0.007	1.00	1.00
40	0.008	1.00	1.00
50	0.009	1.00	1.00
60	0.010	1.01	1.00
70	0.012	1.01	1.01
80	0.014	1.01	1.01
90	0.015	1.01	1.01
100	0.017	1.01	1.01
150	0.023	1.01	1.01
200	0.027	1.01	1.01
350	0.033	1.01	1.01
300	0.032	1.01	1.01
350	0.033	1.01	1.01
400	0.035	1.01	1.01
450	0.036	1.01	1.01
500	0.038	1.01	1.01
550	0.038	1.01	1.01
600	0.041	1.01	1.01
700	0.042	1.02	1.01
800	0.043	1.02	1.01
900	0.045	1.02	1.01
1000	0.047	1.02	1.01
1100	0.047	1.02	1.01
1200	0.049	1.01	1.01
1400	0.052	1.01	1.01
1600	0.052	1.01	1.01
1800	0.053	1.01	1.01
2000	0.054	1.01	1.01
2200	0.057	1.01	1.01
2400	0.058	1.01	1.01
2600	0.059	1.01	1.01
2800	0.058	1.01	1.01
3000	0.062	1.01	1.01
3200	0.063	1.00	1.00
3400	0.063	1.00	1.00
3600	0.062	1.01	1.01
3800	0.066	1.01	1.01
4000	0.068	1.02	1.02
4200	0.070	1.02	1.02
4400	0.061	1.02	1.03
4600	0.054	1.02	1.03
4800	0.057	1.02	1.03
5000	0.063	1.02	1.04
5200	0.087	1.02	1.04
5400	0.081	1.02	1.04
5600	0.090	1.02	1.04
5800	0.068	1.02	1.04
6000	0.067	1.01	1.04

## Typical Performance Curves



### Outline Dimensions



CASE #	A	B	C	D	E	WT. GRAM
DJ2575	1.00 (25.40)	.98 (24.89)	1.40 (35.54)	.748 (19.00)	.472 (12.00)	56.3

Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .03$ ; 3Pl.  $+ .015$

#### Note:

1. Case material: **Brass**
2. Coupling material: **Stainless Steel**
3. Case Finish: **Nickel plate**
4. Coupling Finish: **Passivation**



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.

<b>Specification</b>	<b>Test/Inspection Condition</b>	<b>Reference/Spec</b>
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I