



COAXIAL

# Adapter

## NF-NF50+

50Ω DC to 6 GHz N-Type Female to N-Type Female

### FEATURES

- Excellent VSWR, 1.05:1 typ.
- Low Insertion Loss, 0.05 dB typ.
- Tri-metal finish



Generic photo used for illustration purposes only

### APPLICATIONS

- Interconnection of RF Cables and Equipment
- Connector Saver

<b>Model No.</b>	NF-NF50+
<b>Case Style</b>	DJ1092
<b>Connectors</b>	N-Type Female to N-Type Female

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

### ELECTRICAL SPECIFICATIONS AT +25 °C

Parameter	Frequency (GHz)	Electrical			Units
		Min.	Typ.	Max.	
Frequency Range		DC		6	GHz
Insertion Loss	DC - 6	—	0.05	0.10	dB
VSWR	DC - 2	—	—	1.10	:1
	DC - 4	—	—	1.20	
	DC - 6	—	—	1.20	

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameter	Ratings
Operating Temperature	-55 °C to 100 °C
Storage Temperature	-55 °C to 100 °C

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

REV. C  
 ECO-012138  
 NF-NF50+  
 MCL NY  
 260505





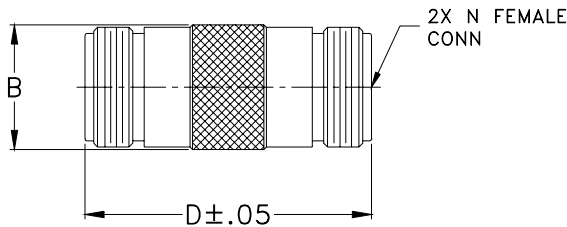
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## OUTLINE DRAWING



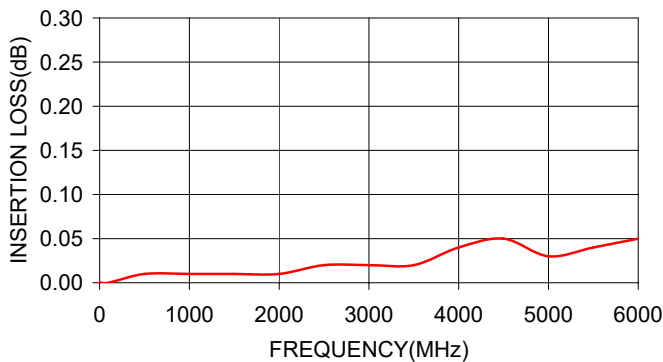
## OUTLINE DIMENSIONS (Inches/mm)

A	B	C	D	E	wt
--	.65	--	1.50	--	grams
--	16.5	--	38.00	--	37.2

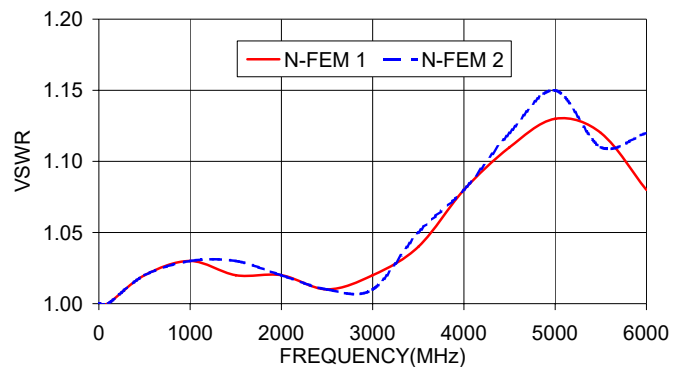
## TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N-Type Female	N-Type Female
0.5	0.00	1.00	1.00
10	0.00	1.00	1.00
100	0.00	1.00	1.00
500	0.01	1.02	1.02
1000	0.01	1.03	1.03
1500	0.01	1.02	1.03
2000	0.01	1.02	1.02
2500	0.02	1.01	1.01
3000	0.02	1.02	1.01
3500	0.02	1.04	1.05
4000	0.04	1.08	1.08
4500	0.05	1.11	1.12
5000	0.03	1.13	1.15
5500	0.04	1.12	1.11
6000	0.05	1.08	1.12

NF-NF50+  
INSERTION LOSS



NF-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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



# Adapter, N-Female to N-Female

# NF-NF50+

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-FEMALE 1 RETURN LOSS (dB)	N-FEMALE 2 RETURN LOSS (dB)
0.5	0.01	46.06	46.06
10	0.01	46.06	46.06
100	0.01	46.06	46.06
500	0.01	40.09	40.09
1000	0.01	36.61	36.61
1500	0.01	40.09	36.61
2000	0.01	40.09	40.09
2500	0.02	46.06	46.06
3000	0.02	40.09	46.06
3500	0.02	34.15	32.26
4000	0.04	28.30	28.30
4500	0.05	25.66	24.94
5000	0.03	24.29	23.13
5500	0.04	24.94	25.66
6000	0.05	28.30	24.94

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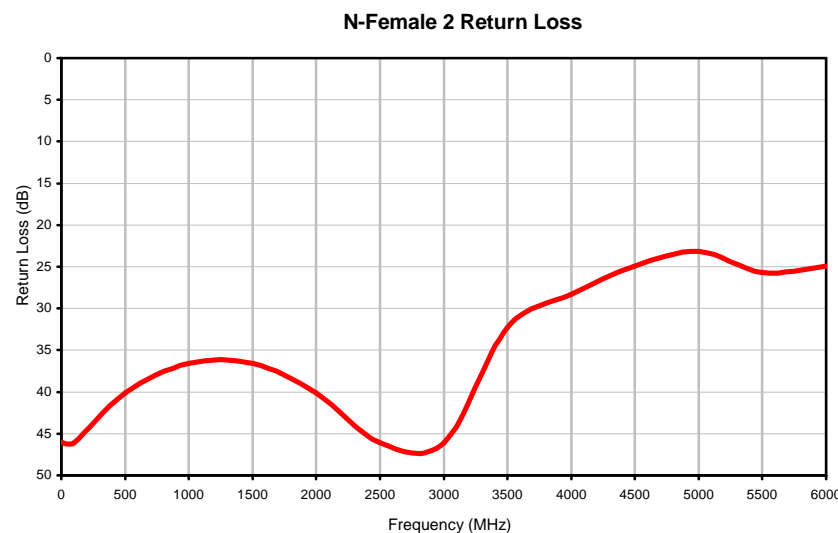
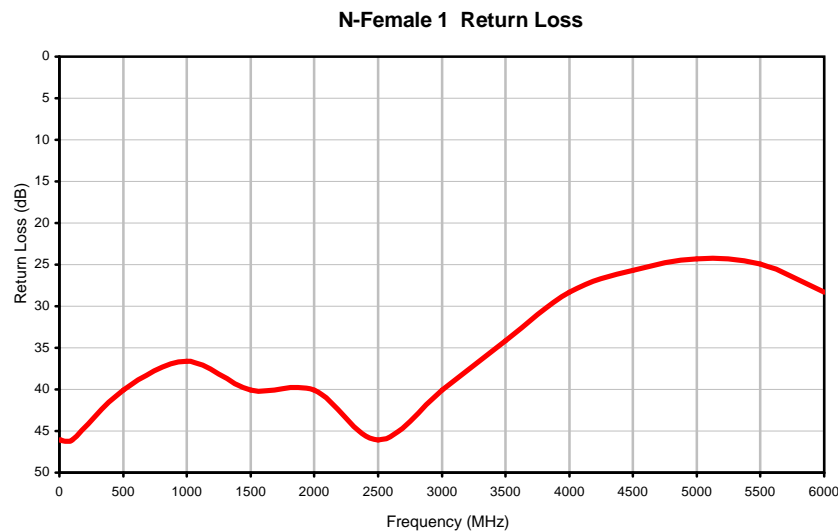
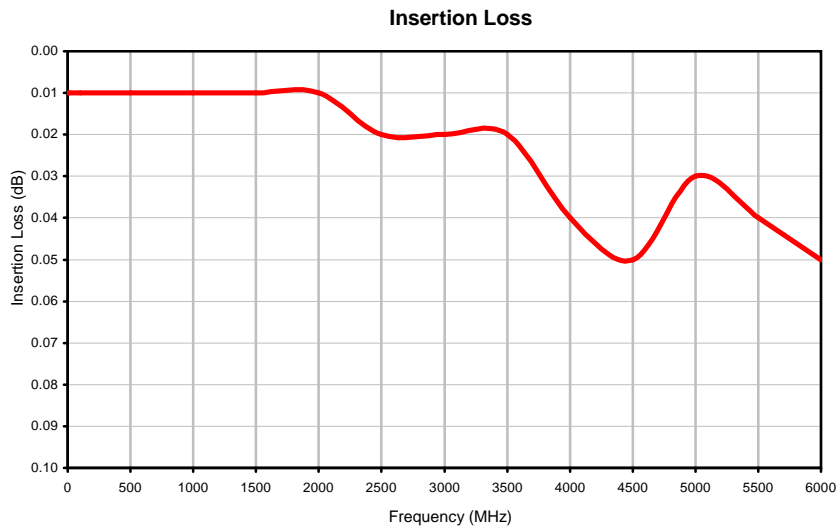
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## Typical Performance Curves



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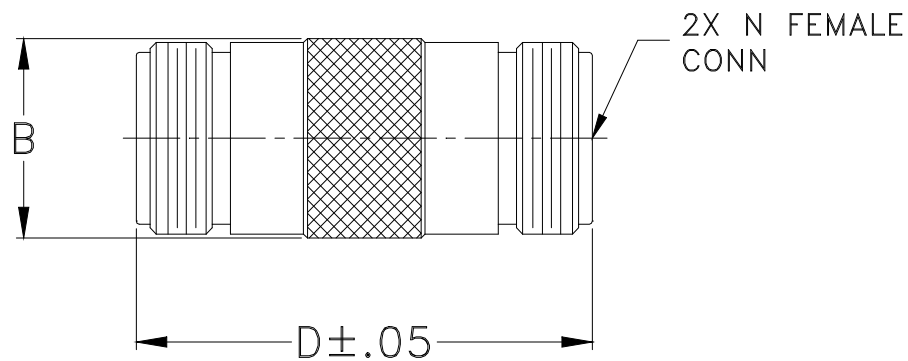
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### Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ1092	--	.65 (16.5)	--	1.50 (38.10)	--	37.2

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

#### Notes:

1. Case material: Brass
2. Finish: Tri-metal (Cu-Sn-Zn) plate.



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