



Adapter, N-F to N-M

NF-NM50+

50Ω DC to 11 GHz

THE BIG DEAL

- Excellent VSWR, 1.03:1 typ. at 6 GHz
- Low insertion loss, 0.04 dB typ. at 6 GHz
- Tri metal finish

APPLICATIONS

- Interconnection of RF cables and equipment
- Connector saver

*Generic photo used for illustration purposes only*

Model No.	NF-NM50+
Case Style	DJ1028-1
Connectors	N-Fem to N-Male

+RoHS Compliant

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

PRODUCT OVERVIEW

Mini-Circuits' NF-NM50+ is a coaxial N-Female to N-Male adapter supporting a wide range of applications from DC to 11 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The NF-NM50+ features a tri-metal finish construction and measures only 1.58" in length.

KEY FEATURES

Feature	Advantages
Excellent VSWR, 1.03:1 typ. at 6 GHz	Provides good matching for 50Ω systems and minimizes signal reflections across wide Frequency Range.
Very low insertion loss, 0.04 dB typ. at 6 GHz	Provides excellent signal power transmission from input to output.
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.



COAXIAL

Adapter, N-F to N-M

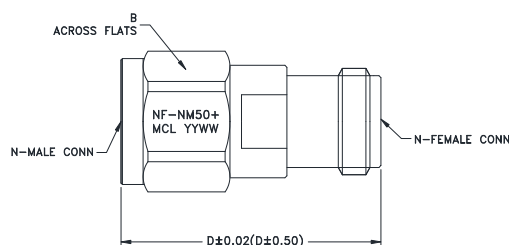
NF-NM50+

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.

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inches/mm)

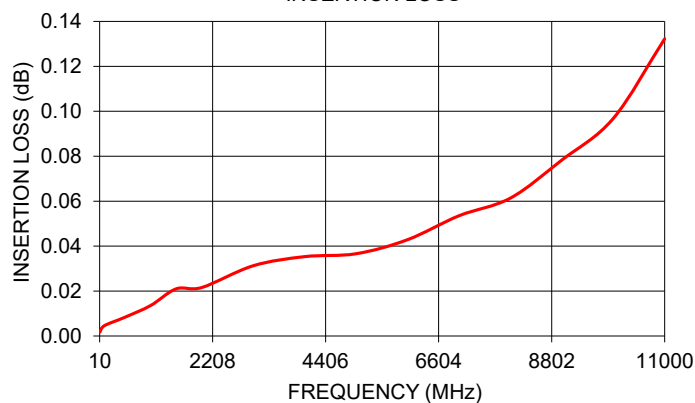
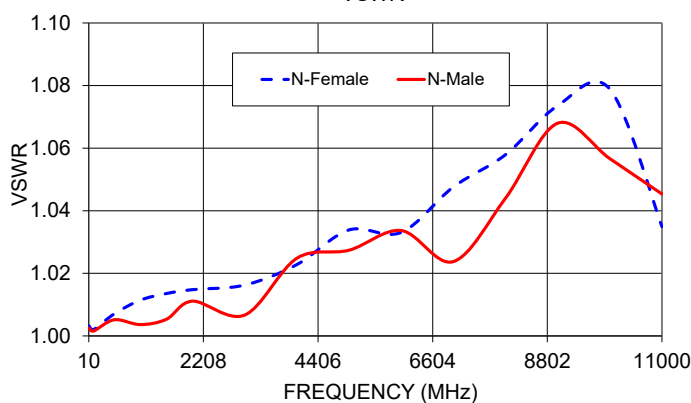
A	B	C	D	E	wt
--	0.748	--	1.580	--	grams
--	19.0	--	40.1	--	52

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		11	GHz
Insertion Loss	DC-6	--	0.04	0.2	dB
	6-11	--	0.07	0.3	
VSWR	DC-6	--	1.02	1.1	:1
	6-11	--	1.06	1.2	

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N-Female	N-Male
10	< 0.01	< 0.01	< 1.01
100	< 0.01	< 0.01	< 1.01
500	0.01	1.01	1.01
1000	0.01	1.01	< 1.01
1500	0.02	1.01	1.01
2000	0.02	1.01	1.01
3000	0.03	1.02	1.01
4000	0.04	1.02	1.02
5000	0.04	1.03	1.03
6000	0.04	1.03	1.03
7000	0.05	1.05	1.02
8000	0.06	1.06	1.04
9000	0.08	1.07	1.07
10000	0.10	1.08	1.06
11000	0.13	1.03	1.05

NF-NM50+
INSERTION LOSSNF-NM50+
VSWR

NOTES

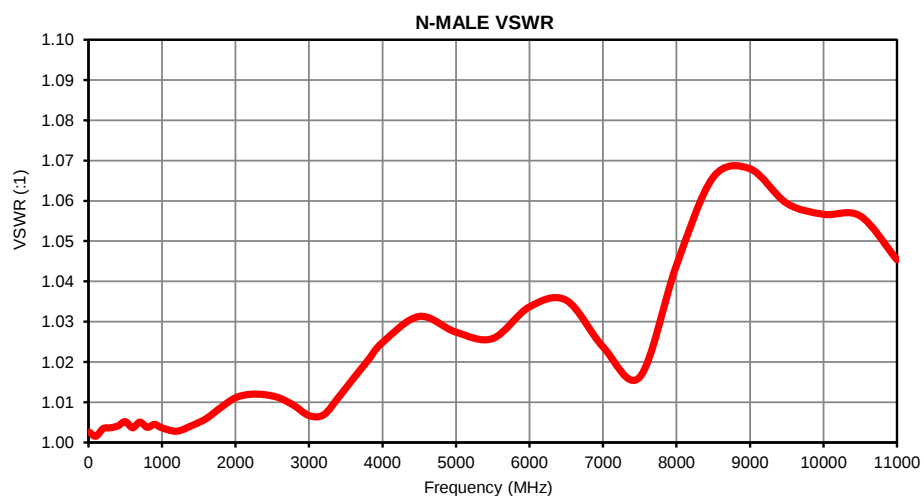
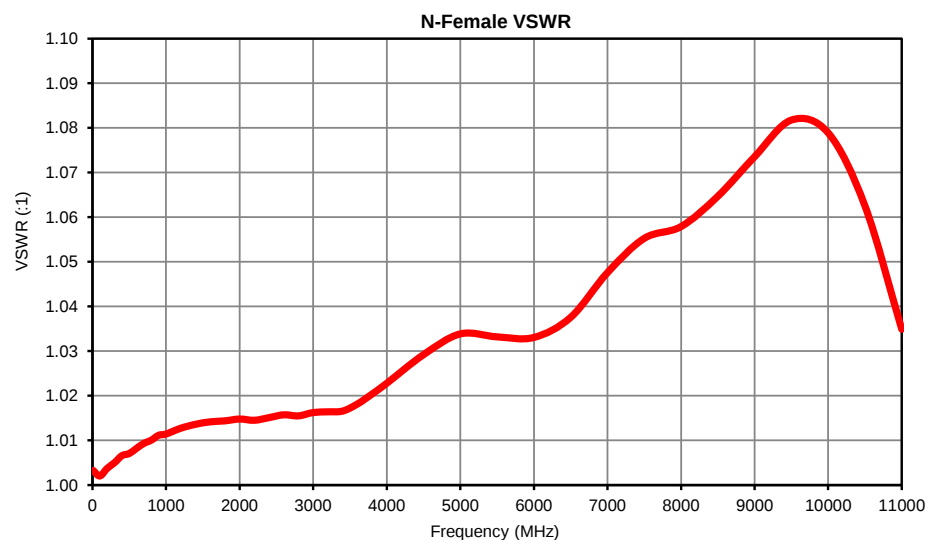
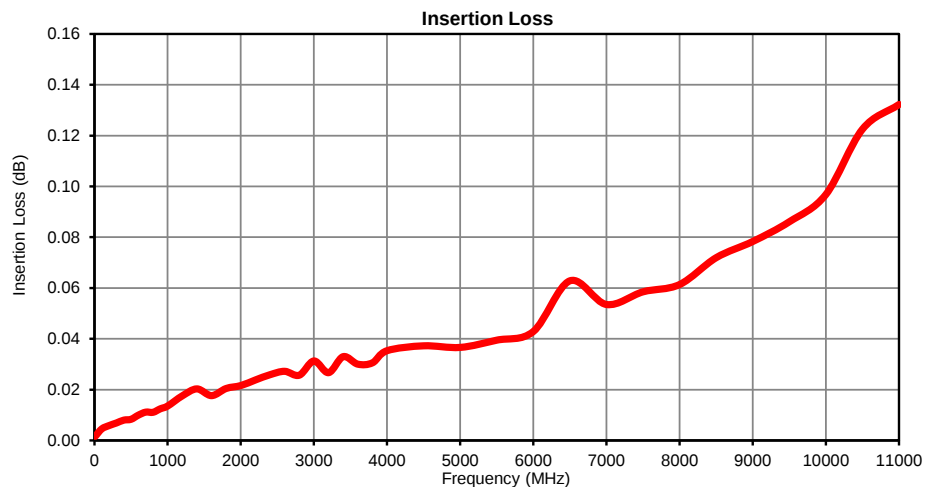
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- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document 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



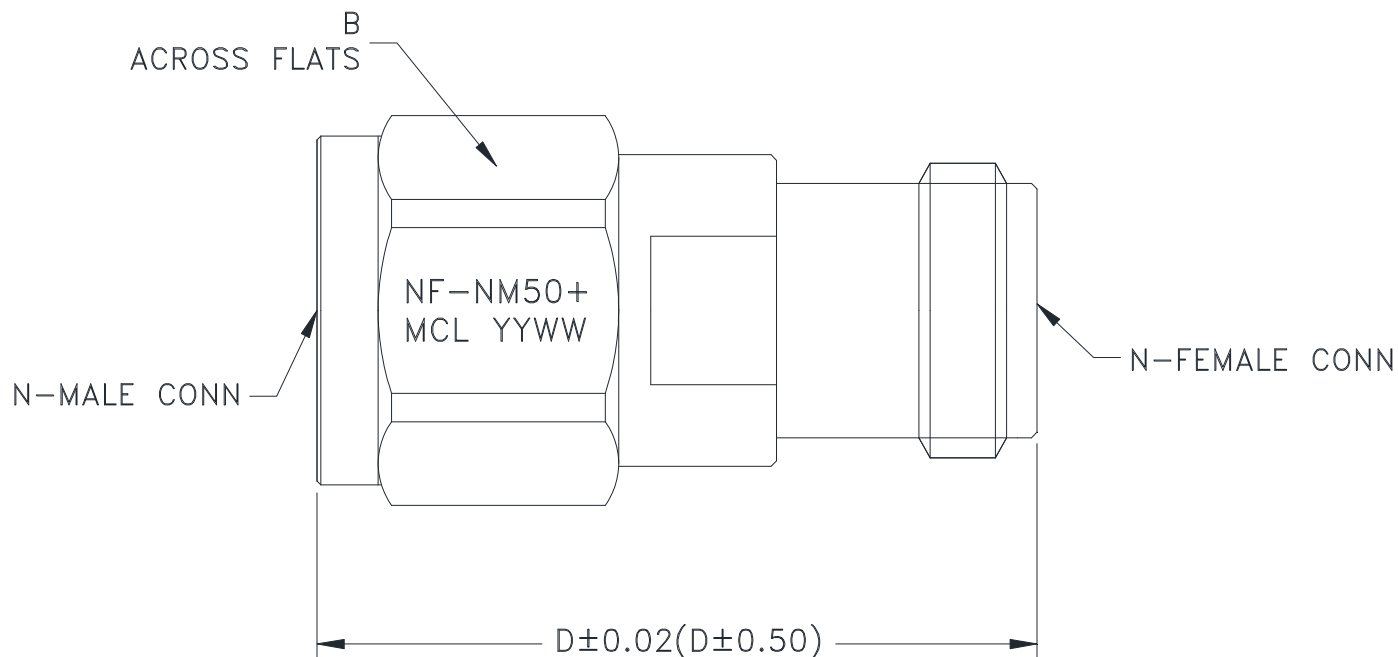
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-FEMALE VSWR (:1)	N-MALE VSWR (:1)
10	0.00	1.00	1.00
100	0.00	1.00	1.00
200	0.01	1.00	1.00
300	0.01	1.01	1.00
400	0.01	1.01	1.00
500	0.01	1.01	1.01
600	0.01	1.01	1.00
700	0.01	1.01	1.01
800	0.01	1.01	1.00
900	0.01	1.01	1.00
1000	0.01	1.01	1.00
1200	0.02	1.01	1.00
1400	0.02	1.01	1.00
1600	0.02	1.01	1.01
1800	0.02	1.01	1.01
2000	0.02	1.01	1.01
2200	0.02	1.01	1.01
2400	0.03	1.02	1.01
2600	0.03	1.02	1.01
2800	0.03	1.02	1.01
3000	0.03	1.02	1.01
3200	0.03	1.02	1.01
3400	0.03	1.02	1.01
3600	0.03	1.02	1.02
3800	0.03	1.02	1.02
4000	0.04	1.02	1.02
4500	0.04	1.03	1.03
5000	0.04	1.03	1.03
5500	0.04	1.03	1.03
6000	0.04	1.03	1.03
6500	0.06	1.04	1.04
7000	0.05	1.05	1.02
7500	0.06	1.06	1.02
8000	0.06	1.06	1.04
8500	0.07	1.06	1.07
9000	0.08	1.07	1.07
9500	0.09	1.08	1.06
10000	0.10	1.08	1.06
10500	0.12	1.06	1.06
11000	0.13	1.03	1.05

Typical Performance Curves



Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAMS
DJ1028-1	--	.748 (19.0)	--	1.58 (40.1)	--	52

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

Notes:

1. Case material: Free Machining Brass (C3604 BD).
2. Finish: Tri Metal Alloy PLATING.



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	