COAXIAL

Adapter, N-M to N-M

NM-NM50+

50Ω DC to 6 GHz

THE BIG DEAL

- Ultra-wideband, DC-6 GHz
- Flat response
- Low insertion loss, 0.12 dB
- Excellent VSWR, 1.03:1 typ.

Generic photo used for illustration purposes only

Model No.	NM-NM50+
Case Style	DJ2460
Connectors	N-Male to N-Male

+RoHS Compliant

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

APPLICATIONS

- Interconnection of RF cables and equipment
- Test setup

PRODUCT OVERVIEW

Mini-Circuits' NM-NM50+ is a coaxial N-Male 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 NM-NM50+ features passivated stainless steel construction and measures only 0.72" (l) x 0.80" (dia.).

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, 1.03:1 typ.	Provides good matching for 50Ω systems and minimizes signal reflections across wide Frequency Range.
Low insertion loss, 0.12 dB	Provides excellent signal power transmission from input to output.
Passivated stainless steel construction.	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.

REV. A
ECO-012138
NM-NM50+
MCL NY
220221

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MAXIMUM RATINGS

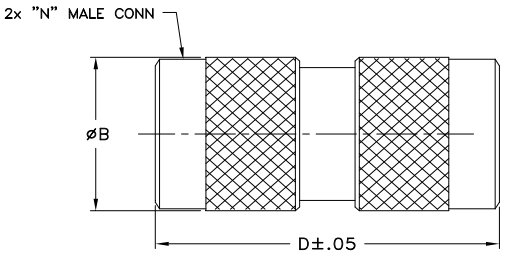
Parameter	Ratings
Operating temperature	-55°C to 100°C
Storage temperature	-55°C to 100°C

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

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		6	GHz
Insertion Loss	DC - 6	—	0.12	—	dB
VSWR	DC - 2	—	1.01	1.2	:1
	DC - 4	—	1.02	1.2	
	DC - 6	—	1.03	1.2	

OUTLINE DRAWING

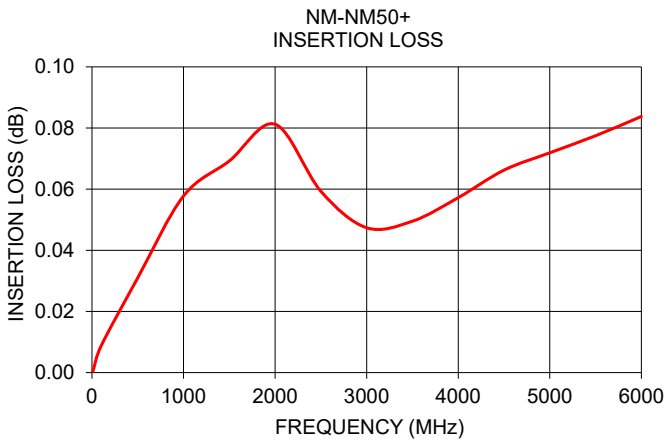


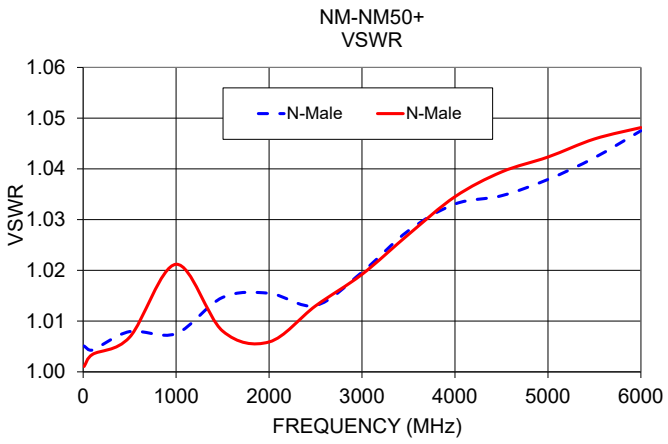
OUTLINE DIMENSIONS (Inch / mm)

A	B	C	D	E	wt
--	0.791	--	1.470	--	grams
--	20.1	--	37.35	--	48.4

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N-Male	N-Male
10	0.00	1.01	1.00
100	0.01	1.00	1.00
500	0.03	1.01	1.01
1000	0.06	1.01	1.02
1500	0.07	1.01	1.01
2000	0.08	1.02	1.01
2500	0.06	1.01	1.01
3000	0.05	1.02	1.02
3500	0.05	1.03	1.03
4000	0.06	1.03	1.03
4500	0.07	1.03	1.04
5000	0.07	1.04	1.04
5500	0.08	1.04	1.05
6000	0.08	1.05	1.05





NOTES

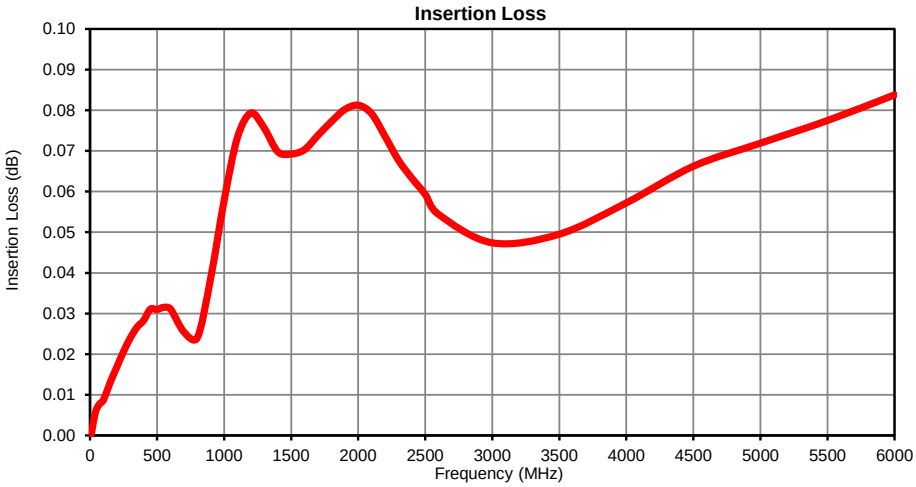
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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

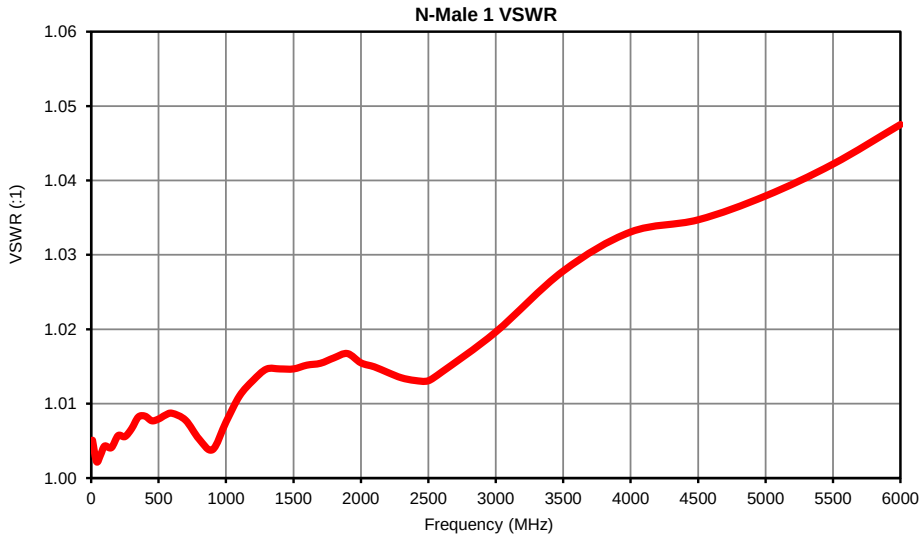
Adapter, N-Male to N-Male NM-NM50+

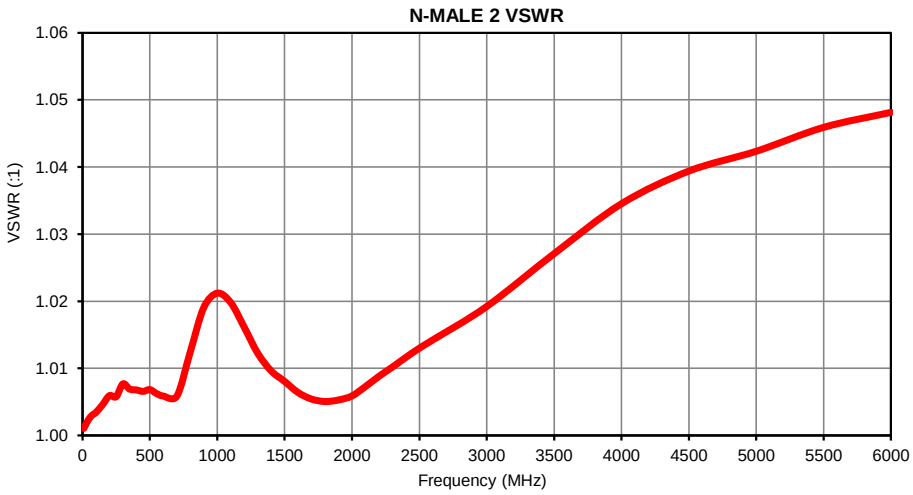
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-MALE 1 VSWR (:1)	N-MALE 2 VSWR (:1)
10	0.00	1.01	1.00
40	0.01	1.00	1.00
70	0.01	1.00	1.00
100	0.01	1.00	1.00
150	0.01	1.00	1.00
200	0.02	1.01	1.01
250	0.02	1.01	1.01
300	0.02	1.01	1.01
350	0.03	1.01	1.01
400	0.03	1.01	1.01
450	0.03	1.01	1.01
500	0.03	1.01	1.01
550	0.03	1.01	1.01
600	0.03	1.01	1.01
700	0.03	1.01	1.01
800	0.02	1.01	1.01
900	0.04	1.00	1.02
1000	0.06	1.01	1.02
1100	0.07	1.01	1.02
1200	0.08	1.01	1.02
1300	0.08	1.01	1.01
1400	0.07	1.01	1.01
1500	0.07	1.01	1.01
1600	0.07	1.02	1.01
1700	0.07	1.02	1.01
1800	0.08	1.02	1.01
1900	0.08	1.02	1.01
2000	0.08	1.02	1.01
2100	0.08	1.01	1.01
2200	0.07	1.01	1.01
2300	0.07	1.01	1.01
2400	0.06	1.01	1.01
2500	0.06	1.01	1.01
2600	0.05	1.01	1.01
3000	0.05	1.02	1.02
3500	0.05	1.03	1.03
4000	0.06	1.03	1.03
4500	0.07	1.03	1.04
5000	0.07	1.04	1.04
5500	0.08	1.04	1.05
6000	0.08	1.05	1.05

Typical Performance Curves



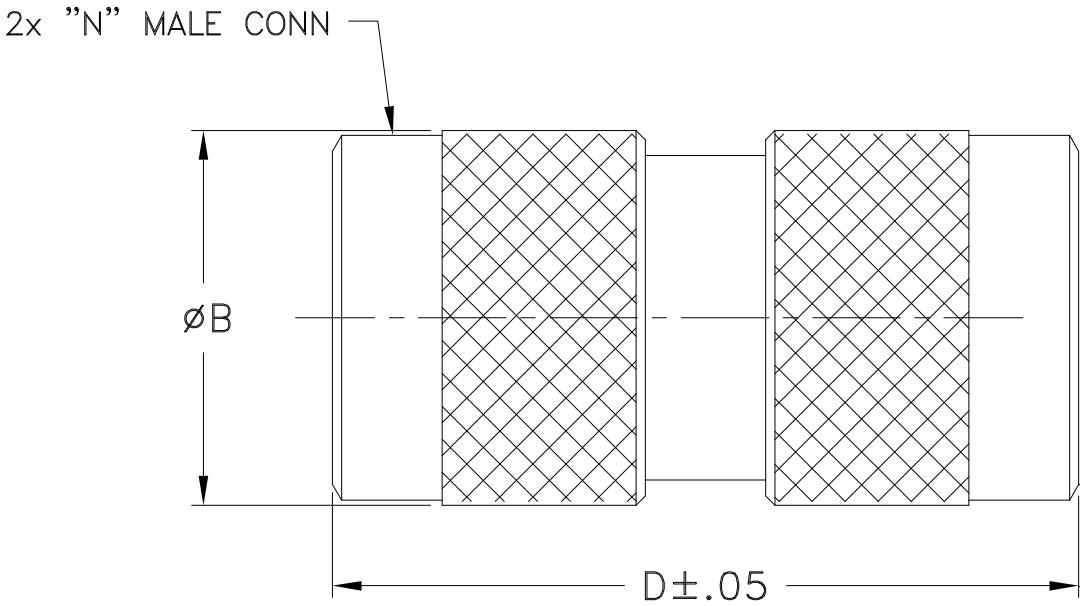




Case Style DJ

DJ2460

Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ2460	-- --	.791 (20.1)	-- --	1.471 (37.35)	-- --	50.0

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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Environmental Specifications ENV89

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	

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