Coaxial

Adapter, N-MALE to SMA-F

NM-SF50+

50Ω DC to 18 GHz

Generic photo used for illustration purposes only

CASE STYLE: DJ825

Connectors		Model
Conn1	**Conn2**	
N-MALE	**SMA-F**	NM-SF50+

+RoHS Compliant

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

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.

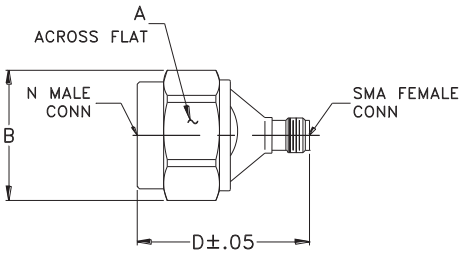
Features

- flat response
- excellent VSWR
- passivated stainless steel
- low cost adapters, available from stock

Applications

- interconnection of RF cables and equipment

Outline Drawing



Outline Dimensions (inch / mm)

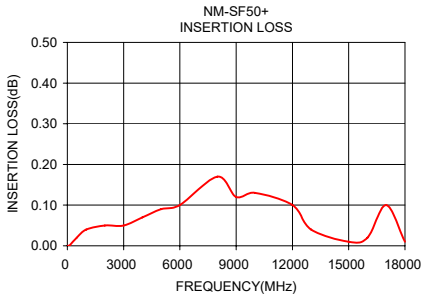
A	B	C	D	E	wt
.787	.866	--	1.24	--	grams
20.0	22.0	--	31.50	--	33.6

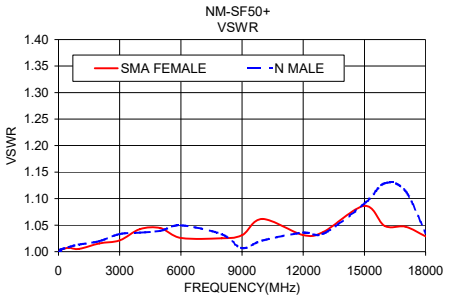
Electrical Specifications T_{AMB}=25°C

FREQUENCY (GHz)	INSERTION LOSS (dB)	VSWR (:1) Max.		
f_L-f_U	Typ.	DC-8 GHz	DC-12.4 GHz	DC-18 GHz
DC-18	0.1	1.15	1.20	1.30

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		N-MALE	SMA-F
10.00	0.00	1.00	1.00
50.00	0.00	1.00	1.00
100.00	0.00	1.00	1.00
100.00	0.00	1.00	1.00
500.00	0.02	1.01	1.01
1000.00	0.04	1.01	1.01
2000.00	0.05	1.02	1.02
3000.00	0.05	1.03	1.02
4000.00	0.07	1.04	1.04
5000.00	0.09	1.04	1.04
6000.00	0.10	1.05	1.03
8000.00	0.17	1.03	1.03
9000.00	0.12	1.01	1.03
10000.00	0.13	1.02	1.06
12000.00	0.10	1.04	1.03
13000.00	0.04	1.03	1.04
15000.00	0.01	1.09	1.09
16000.00	0.02	1.13	1.05
17000.00	0.10	1.11	1.05
18000.00	0.01	1.03	1.03





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

REV. F
M151107
NM-SF50+
EE-9107
RS/TD/CP/AM
200507

Adapter, N-Male to SMA-Female NM-SF50+

Typical Performance Data

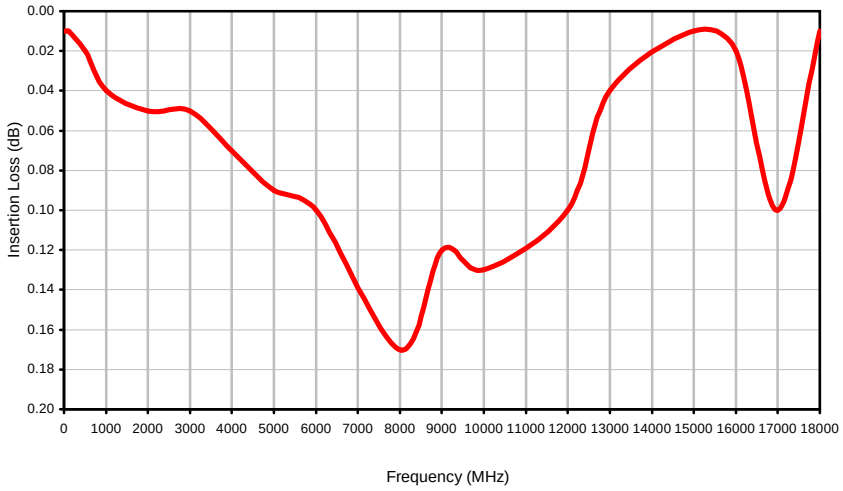
FREQUENCY (MHz)	INSERTION LOSS (dB)	N-MALE RETURN LOSS (dB)	SMA-FEMALE RETURN LOSS (dB)
10	0.01	46.06	46.06
50	0.01	46.06	46.06
100	0.01	46.06	46.06
100	0.01	46.06	46.06
500	0.02	47.38	48.67
1000	0.04	43.60	51.87
2000	0.05	40.18	42.29
3000	0.05	35.77	39.56
4000	0.07	35.09	33.64
5000	0.09	34.34	33.29
6000	0.10	32.31	37.92
8000	0.17	35.83	38.06
9000	0.12	49.38	36.30
10000	0.13	39.65	30.47
12000	0.10	35.10	36.26
13000	0.04	35.54	34.69
15000	0.01	27.25	27.67
16000	0.02	24.35	32.54
17000	0.10	25.32	32.75
18000	0.01	35.39	36.95

Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see minicircuits.com

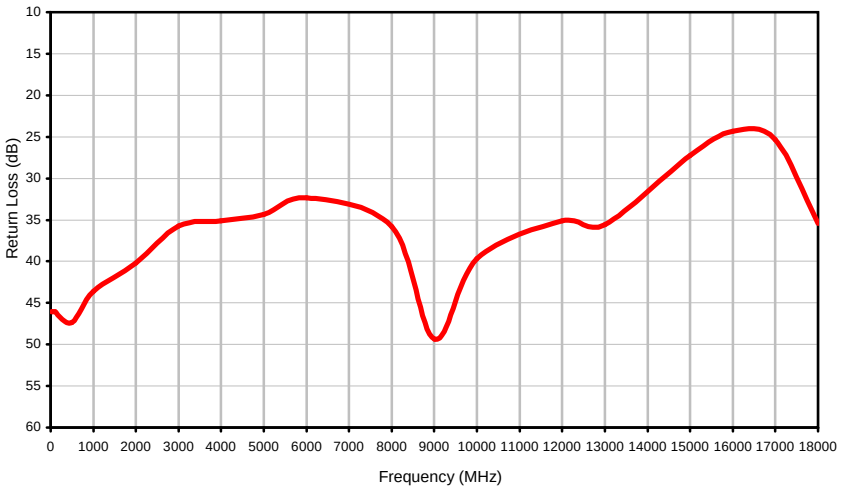
Adapter, N-Male to SMA-Female NM-SF50+

Typical Performance Curves

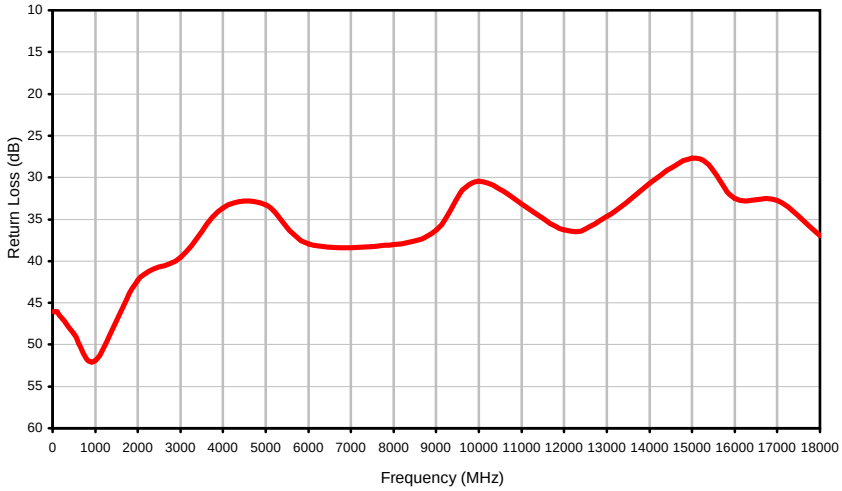
Insertion Loss



N-Male Return Loss



SMA-Female Return Loss

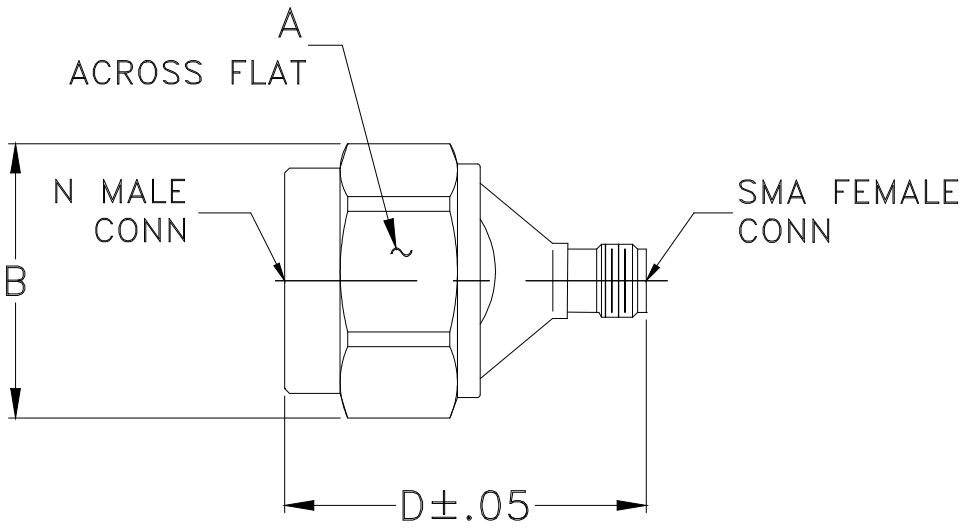


Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see minicircuits.com

Case Style DJ

DJ825

Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ825	.787 (20.00)	.866 (22.00)	-- --	1.24 (31.50)	-- --	33.6

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

Note:

1. Case Material: Stainless steel.
2. Finish: Passivation.

This document and its contents are the property of Mini-Circuits

Mini-Circuits

Environmental Specifications ENV28

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 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

This document and its contents are the property of Mini-Circuits.