

# N-Type / SMA Adaptenuator

50Ω 0.5W 20dB DC to 3000 MHz

## NM-SF-20+



CASE STYLE: DJ1208

### Maximum Ratings

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

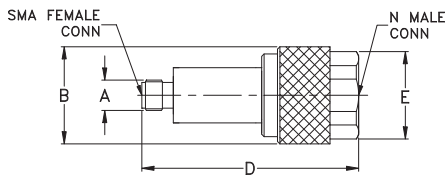
Permanent damage may occur if any of these limits are exceeded.

### Features

- Wideband, DC to 3000 MHz
- Improved interface matching
- Excellent VSWR, 1.1:1 typ
- Rugged unibody construction

Connectors	Model	Price	Qty.
Conn1 N-Male	Conn2 SMA-Female	NM-SF-20+	\$19.95ea. (1-9)

### Outline Drawing



### Applications

- Instrumentation
- Provides attenuation and connector type change
- Minimizes hardware

### +RoHS Compliant

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

### Electrical Specifications

FREQ. (MHz)	ATTENUATION (dB) Flatness *								VSWR (:1)						MAX. INPUT POWER (W)	
	DC-0.5 GHz		DC-1 GHz		DC-2 GHz		DC-3 GHz		DC-1 GHz		DC-2 GHz		DC-3 GHz			
	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.		
DC-3000	20±0.3	0.05	0.15	0.1	0.3	0.4	0.6	0.6	1.0	1.01	1.20	1.04	1.20	1.09	1.25	0.5

\* Flatness defined as peak to peak attenuation over band divided by 2.

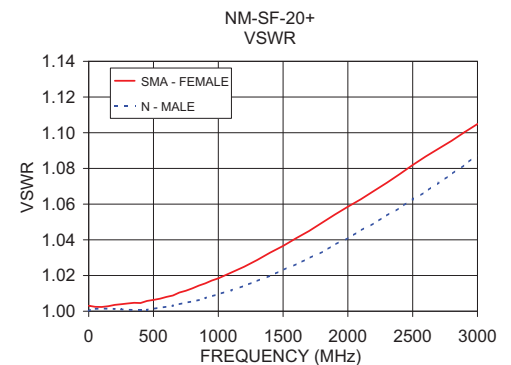
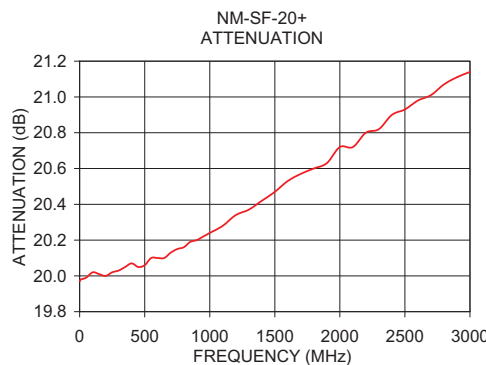
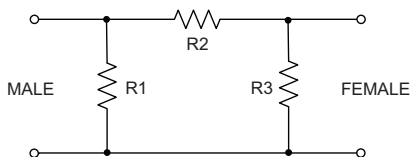
### Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	VSWR (:1)	
		SMA-FEMALE	N-MALE
1	19.97	1.00	1.00
10	19.98	1.00	1.00
100	20.02	1.00	1.00
300	20.03	1.00	1.00
500	20.06	1.01	1.00
750	20.15	1.01	1.00
1000	20.24	1.02	1.01
1200	20.34	1.03	1.01
1400	20.42	1.03	1.02
1600	20.53	1.04	1.03
1800	20.60	1.05	1.03
2000	20.72	1.06	1.04
2200	20.80	1.07	1.05
2500	20.93	1.08	1.06
2700	21.01	1.09	1.07
3000	21.14	1.10	1.09

### Outline Dimensions (inch/mm)

A	B	D	E	wt.
.25	.80	1.79	.72	grams
6.35	20.32	45.47	18.29	49.0

### Electrical Schematic



**Mini-Circuits®**  
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