

N-Type Fixed Attenuator

50Ω 0.5W 30dB DC to 6000 MHz

UNAT-30+

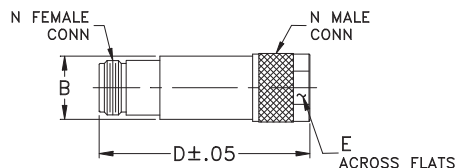
Maximum Ratings

Operating Temperature -45°C to 100°C

Storage Temperature -55°C to 100°C

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

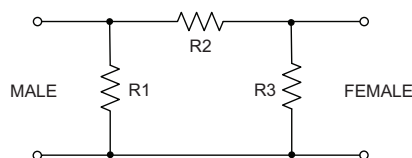
Outline Drawing



Outline Dimensions (inch/mm)

B	D	E	wt.
.68	2.11	.718	grams
17.27	53.59	18.24	72.5

Electrical Schematic



Features

- Wideband coverage, DC to 6 GHz
- Rugged unibody construction
- Off-the-shelf availability
- Very low cost

Application

- Impedance matching
- signal level adjustment
- Test equipment
- Lab Use



CASE STYLE: FF779

Connectors	Model	Price	Qty.
N - type	UNAT-30+	\$15.95 ea.	(1-9)

+RoHS Compliant

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

Electrical Specifications

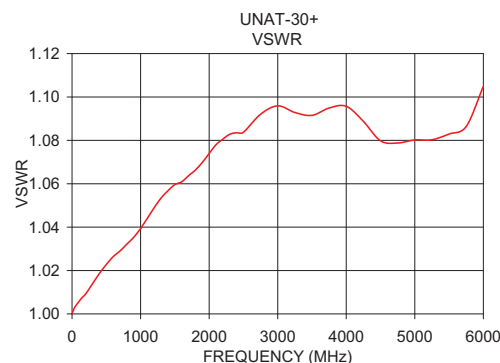
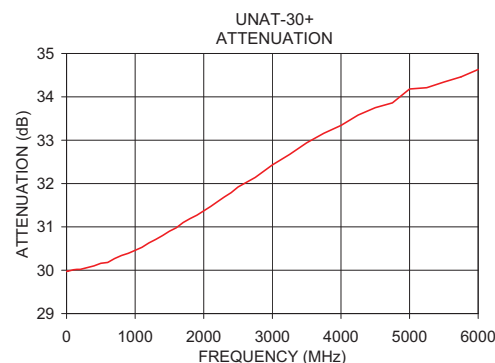
FREQ. RANGE (MHz)	ATTENUATION * (dB)					VSWR (:1)					MAX. INPUT POWER (W)
	Flatness **										
	DC-3GHz		3-4.5GHz	4.5-6GHz	DC-6GHz	DC-3GHz		3-4.5GHz	4.5-6GHz		
	Norm.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Max.	Typ.	
DC-6000	30 ± 0.3	1.2	0.7	0.4	2.3	1.04	1.25	1.07	1.25	1.10	0.5

* Attenuation varies by 0.3dB Max. over temperature.

** Flatness= variation over band divided by 2.

Typical Performance Data

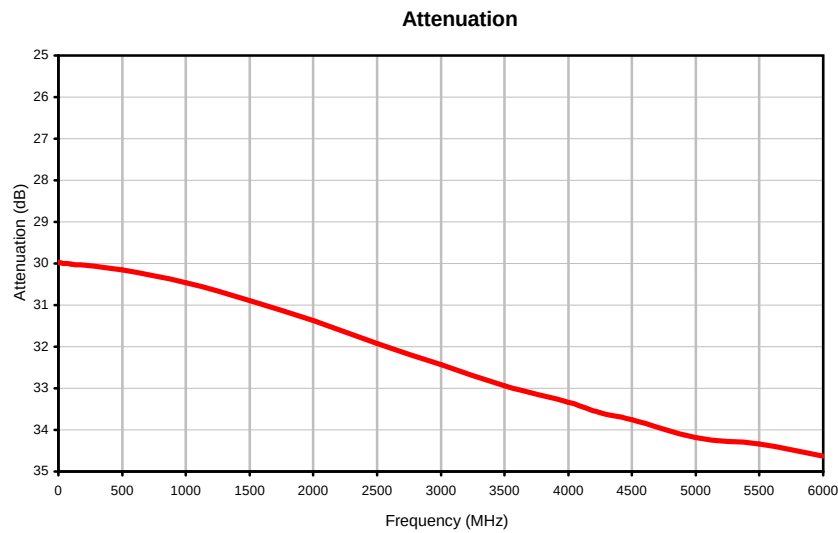
Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1	29.97	1.00
10	29.98	1.00
100	30.01	1.01
500	30.16	1.02
1000	30.46	1.04
1500	30.90	1.06
2000	31.37	1.07
2500	31.92	1.08
3000	32.43	1.10
3500	32.94	1.09
4000	33.34	1.10
4250	33.58	1.09
4500	33.75	1.08
5000	34.18	1.08
5500	34.34	1.08
6000	34.63	1.10



Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	RETURN LOSS (dB)
1.00	29.97	46.06
10.00	29.98	46.06
100.00	30.01	46.06
500.00	30.16	40.09
1000.00	30.46	34.15
1500.00	30.90	30.71
2000.00	31.37	29.42
2500.00	31.92	28.30
3000.00	32.43	26.44
3500.00	32.94	27.32
4000.00	33.34	26.44
4250.00	33.58	27.32
4500.00	33.75	28.30
5000.00	34.18	28.30
5500.00	34.34	28.30
6000.00	34.63	26.44

Typical Performance Curves

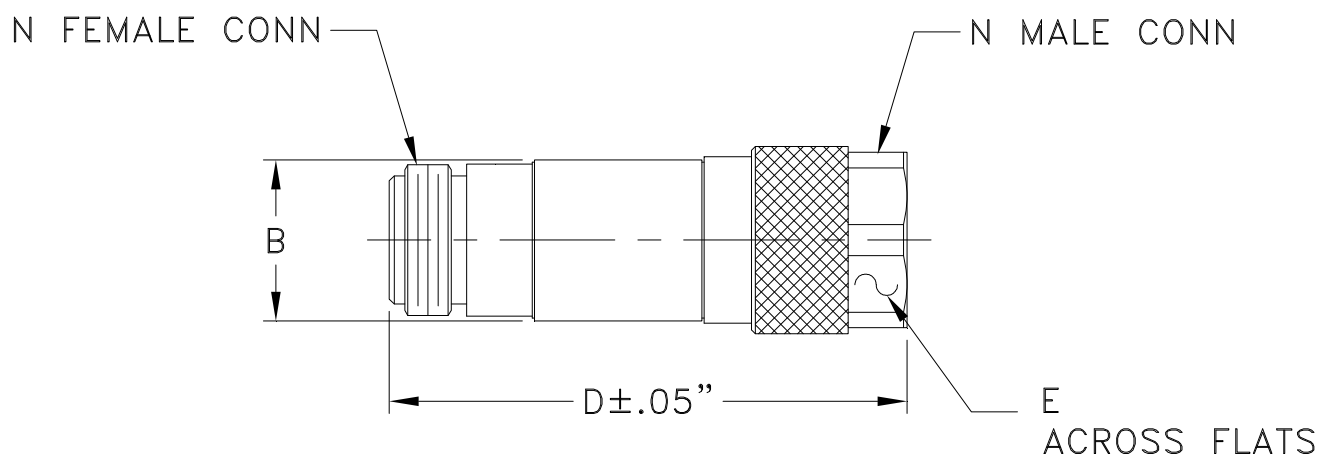


Case Style

FF

Outline Dimensions

FF779



CASE #.	A	B	C	D	E	WT GRAMS
FF779	--	.71 (18.03)	--	2.11 (53.59)	.718 (18.24)	72.5

Dimensions are in inches (mm). Tolerances: 2Pl. $+.05/-0.04$; 3Pl. $\pm .030$

Notes:

1. Case material: Brass.
2. Case finish: Nickel plate.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS



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	-45° 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