

# Fixed Attenuator

### **UNAT-A-SERIES**

50Ω Up to 2W

DC to 6000 MHz

#### THE BIG DEAL

- · Wideband coverage, DC to 6000 MHz
- Up to 2 Watt rating
- Rugged unibody construction
- Excellent VSWR
- Excellent flatness



Generic photo used for illustration purposes only

Model No.	UNAT-A-SERIES
Case Style	FF779
Connectors	N-Type

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

#### **APPLICATIONS**

- Signal level adjustment
- · Impedance matching

#### **PRODUCT OVERVIEW**

Mini-Circuits' UNAT-A series are fixed attenuators from DC to 6000 MHz frequency range with excellent flatness in attenuation. UNAT-A series is available with nominal attenuation of 1 to 30 dB. This attenuator series support testing and measurement application. Precise performance, excellent VSWR and rugged unibody construction makes this model ideal solution for systems requiring precise attenuation across very wide frequency range.

#### **KEY FEATURES**

RETTEATORES			
Feature	Advantages		
Rugged construction	Excellent durability for a long lifetime of use		
Up to 2 Watt rating	Good power handling		
Excellent VSWR	Well matched for 50 $\Omega$ systems		
Flat attenuation	Good performance over the band		

# Fixed Attenuator

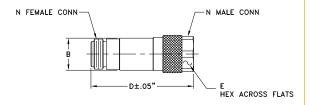
**UNAT-20A+** 

#### **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)

A B C D E Wt. -- .71 -- 2.11 .718 grams -- 18.03 -- 53.59 18.24 72.5

Note: Please refer to case style drawing for details

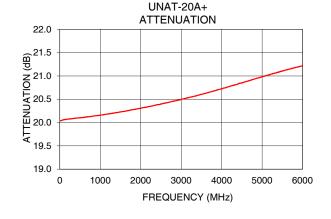
#### **ELECTRICAL SPECIFICATIONS AT 25°C**

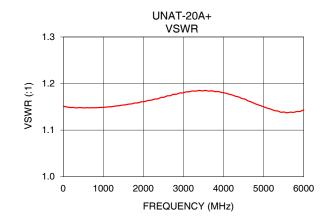
Parameter	Condition (MHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC	-	6000	MHz
Attenuation <sup>1</sup> nominal <sup>3</sup>	10	-	20 ± 0.3	-	dB
	DC - 3000	-	0.40	-	
Attenuation Flatness <sup>2</sup>	3000 - 4500	-	0.40	-	dB
Attenuation Flatness <sup>2</sup>	4500 - 6000	-	0.40	-	
	DC - 6000	-	0.75	-	
	DC - 3000	-	1.2	1.57	
VSWR	3000 - 4500	-	1.2	1.57	:1
	4500 - 6000	-	1.2	-	
Input Power⁴		-	-	0.8	W

- 1. Attenuation varies by 0.3 dB max. over temperature.
- 2. Flatness = variation over band divided by 2.
- 3. Nominal attenuation at 10 MHz
- 4. RF power at 25°C is 0.8W; Derate linearly to 0.6W at 85°C

#### **TYPICAL PERFORMANCE DATA**

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
10	20.04	1.15
100	20.06	1.15
500	20.10	1.15
900	20.15	1.15
1000	20.16	1.15
1400	20.21	1.15
1500	20.23	1.15
2000	20.31	1.16
2500	20.40	1.17
2800	20.46	1.18
3000	20.49	1.18
4000	20.73	1.18
4500	20.85	1.17
5000	20.99	1.15
6000	21.22	1.14





#### 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

