

# **COAXIAL** 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 the model ideal solution for systems requiring precise attenuation across very wide frequency range.

### **KEY FEATURES**

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

RFV B

# COAXIAL Fixed Attenuator

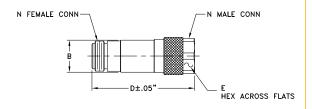
**UNAT-4A+** 

### **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)

Ε С D Wt. .71 2.11 .718 grams 18.03 53.59 72.5

Note: Please refer to case style drawing for details

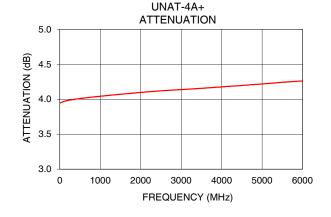
### **ELECTRICAL SPECIFICATIONS AT 25°C**

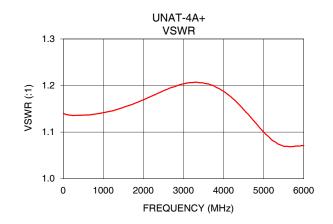
Parameter	Condition (MHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC	-	6000	MHz
Attenuation <sup>1</sup> nominal <sup>3</sup>	10	-	4 ± 0.3	-	dB
	DC - 3000	-	0.20	-	
Attenuation Flatness <sup>2</sup>	3000 - 4500	-	0.15	-	dB
Attenuation Flatness <sup>2</sup>	4500 - 6000	-	0.15	-	
	DC - 6000	-	0.40	-	
	DC - 3000	-	1.20	1.67	
VSWR	3000 - 4500	-	1.20	1.67	:1
	4500 - 6000	-	1.50	-	
Input Power⁴		-	-	1.7	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 1.7W; Derate linearly to 1.0W at 85°C

#### **TYPICAL PERFORMANCE DATA**

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
10	3.95	1.14
100	3.97	1.14
500	4.01	1.14
900	4.04	1.14
1000	4.04	1.14
1400	4.07	1.15
1500	4.07	1.15
2000	4.10	1.17
2500	4.12	1.19
2800	4.13	1.20
3000	4.14	1.20
4000	4.18	1.19
4500	4.20	1.15
5000	4.22	1.10
6000	4.26	1.07





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- 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.
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