



COAXIAL

Fixed Attenuator

UNAT-7A+

Mini-Circuits

50 Ω Up to 1.3 W DC to 6000 MHz 7 dB Attenuation

THE BIG DEAL

- Wideband Coverage, DC to 6000 MHz
- Up to 1.3 Watt Power Handling
- Rugged Unibody Construction
- Excellent VSWR
- Excellent Flatness

APPLICATIONS

- Signal Level Adjustment
- Impedance Matching



Generic photo used for illustration purposes only

Model No.	UNAT-7A+
Case Style	FF779
Connectors	N-Type

+RoHS Compliant

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

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 supports test and measurement applications. Precise performance, excellent VSWR and rugged unibody construction makes these an ideal solution for systems requiring precise attenuation across wide frequency range.

KEY FEATURES

Feature	Advantages
Rugged construction	Excellent durability for a long lifetime of use
Up to 1.3 Watt power handling	Broader application flexibility
Excellent VSWR	Well matched for 50 Ω systems
Excellent attenuation flatness	Improved system calibration and repeatability

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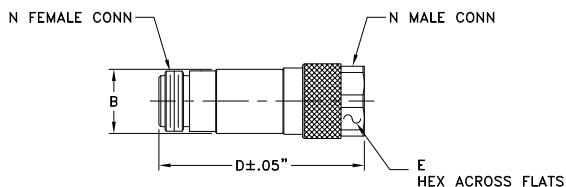
UNAT-7A+

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)

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.	Typ.	Max.	Unit
Frequency Range		DC	-	6000	MHz
Attenuation ¹ nominal ³	10	-	7 ± 0.3	-	dB
Attenuation Flatness ²	DC - 3000	-	0.20	-	dB
	3000 - 4500	-	0.15	-	
	4500 - 6000	-	0.15	-	
	DC - 6000	-	0.40	-	
VSWR	DC - 3000	-	1.2	1.5	:1
	3000 - 4500	-	1.2	1.5	
	4500 - 6000	-	1.5	-	
Input Power ⁴		-	-	1.3	W

1. Attenuation varies by 0.3 dB max. over temperature.

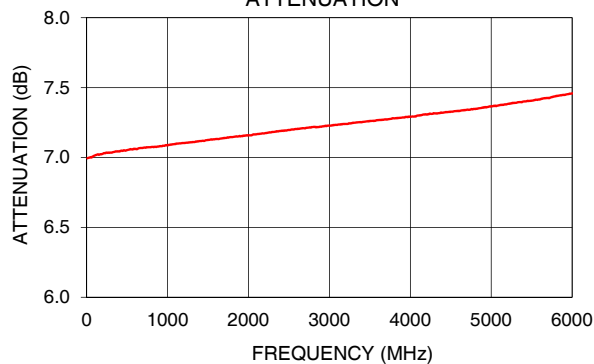
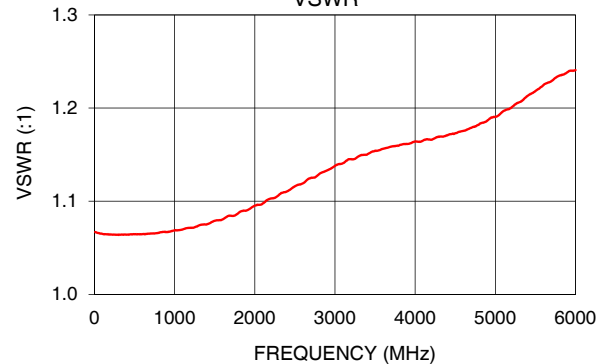
2. Flatness = variation over band divided by 2.

3. Nominal attenuation at 10 MHz

4. Maximum RF power at 25°C is 1.3 W; Derate linearly to 1.0 W at 85°C

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
10	6.99	1.07
100	7.01	1.06
500	7.05	1.06
900	7.08	1.07
1000	7.09	1.07
1400	7.12	1.08
1500	7.13	1.08
2000	7.16	1.10
2500	7.20	1.12
2800	7.22	1.13
3000	7.23	1.14
4000	7.29	1.16
4500	7.33	1.17
5000	7.37	1.19
6000	7.46	1.24

UNAT-7A+
ATTENUATIONUNAT-7A+
VSWR

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

