

DC Passing

# Attenuator

SAT-10DC-3A+

50Ω 100 to 500 MHz

## The Big Deal

- HIGH DC Current handling
- Rugged unibody construction
- DC resistance (in/out) 0.1Ω Typ.



CASE STYLE: FF99

## Product Overview

SAT-10DC-3A+ is a DC Passing fixed attenuator in 100 MHz to 500 MHz frequency range with excellent flatness of attenuation. These units support testing applications. Precise performance, excellent VSWR (1.1:1 typ.) and rugged construction make these models ideal solutions for systems requiring precise attenuation across very wide frequency range.

## Key Features

Feature	Advantages
Excellent VSWR, 1.10 typ	Well-matched for 50Ω systems; reduces effects of phase variation
Flat attenuation	Accurate performance within ±0.8 dB over the full frequency range.
Rugged construction	Excellent durability for a long lifetime of use.

### 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](http://www.minicircuits.com/MCLStore/terms.jsp)



# DC Passing Attenuator

## SAT-10DC-3A+

50Ω 100 to 500 MHz

### 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.



CASE STYLE: FF99

Connectors SMA Model SAT-10DC-3A+

**+RoHS Compliant**

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

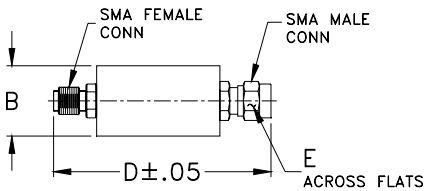
### Features

- High DC Current handling
- Rugged unibody construction
- DC resistance (in/put) 0.1Ω typical

### Applications

- Power passing
- Instrumentation
- Test equipment
- Lab use

### Outline Drawing



### Outline Dimensions (inch/mm)

B	D	E	wt
.67	1.98	.312	grams
17.02	50.29	7.92	42.0

### Electrical Specifications at 25°C

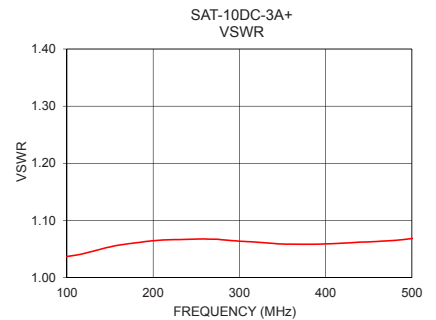
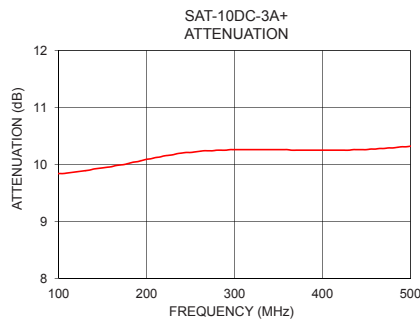
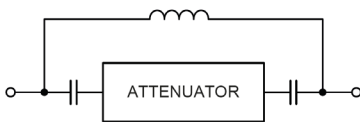
Parameter	Condition (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		100	—	500	MHz
Attenuation Nominal	100-500	9.4	10	10.7	dB
VSWR	100-500	—	1.1	1.5	:1
DC Current	100-500	—	—	3	Amps
Input Power	100-500	—	—	10	dBm

1. Flatness = variation over band divided by 2.

### Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100	9.84	1.04
120	9.87	1.04
140	9.92	1.05
160	9.96	1.06
180	10.02	1.06
200	10.09	1.06
220	10.15	1.07
240	10.20	1.07
260	10.23	1.07
280	10.25	1.07
300	10.26	1.06
320	10.26	1.06
340	10.26	1.06
360	10.26	1.06
380	10.25	1.06
400	10.25	1.06
420	10.25	1.06
450	10.26	1.06
480	10.29	1.07
500	10.32	1.07

### Electrical Schematic



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