

# High Power Termination

## TERM-50W-183S+

50Ω 50W DC to 18 GHz

### The Big Deal

- Ultra-wideband, DC to 18 GHz
- Excellent return loss, 26 dB typ. up to 18 GHz
- Input power handling, 50W
- SMA male connector



CASE STYLE: LL2798-3

### Product Overview

Mini-Circuits' TERM-50W-183S+ is an ultra-wideband 50Ω high power termination capable of absorbing signals up to 50W from DC to 18 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has SMA male connectors, allowing connections with SMA female connectors. The unit features rugged construction for a long life of use and comes in passivated stainless steel connector with black anodized aluminum housing.

### Key Features

Feature	Advantages
Wideband, DC to 18 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good return loss: • 26 dB typ. up to 18 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range
Power handling up to 50W	Meets a wide range of system power requirements.
Wide operating temperature range, -55 to +100°C	Withstands tough operating conditions and is suitable for use near high power components where heat rise is common.

#### 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)



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## SMA-Male

## TERM-50W-183S+

50Ω 50W DC to 18 GHz

### 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.

### Features

- Wideband coverage, DC to 18 GHz
- Return loss, 26 dB typ. up to 18 GHz
- SMA male connector

### Applications

- Cellular communications
- Satellite communications
- Test set-up
- Defense and Radar



Generic photo used for illustration purposes only

CASE STYLE: LL2798-3

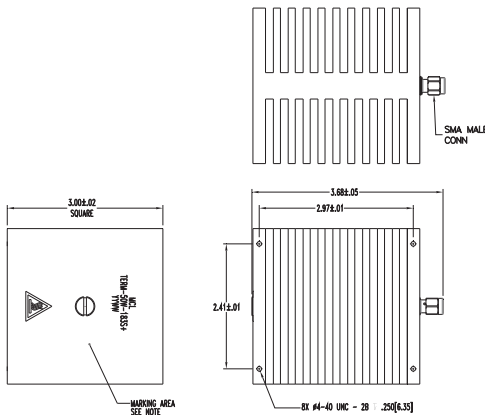
Connector	Model
SMA Male	TERM-50W-183S+

### +RoHS Compliant

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

### Outline Dimensions

inches [mm]



Weight: 862 grams (max.)

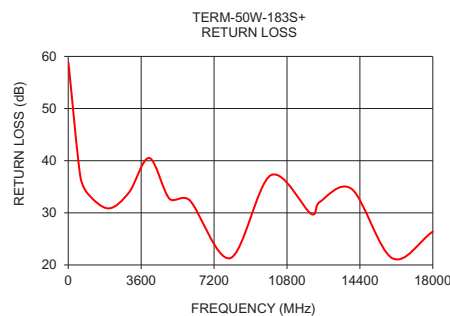
### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	18	GHz
Impedance			50		Ohms
Return Loss	DC - 6	19.1	35	—	dB
	6 - 12.4	16.5	28		
	12.4 - 18	14.7	26		
Input Power <sup>1</sup>	DC - 18	—	—	50	W

1. At 25°C, derate linearly to 20W at 100°C.

### Typical Performance Data

Frequency (MHz)	Return Loss (dB)
10	58.83
600	36.92
1000	33.51
2000	30.85
3000	33.90
4000	40.51
5000	32.70
6000	32.38
8000	21.31
10000	37.20
12000	29.78
12400	32.02
14000	34.56
16000	21.29
18000	26.40



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