

# Termination

### TERM-50W-183N+

 $50\Omega$  50W DC to 18 GHz N-type Male

#### THE BIG DEAL

- · Ultra-Wideband Operation, DC to 18 GHz
- Input Power Handling, 50W
- Excellent Return Loss, 25 dB Typ. up to 18 GHz



Generic photo used for illustration purposes only

Model No.	TERM-50W-183N+
Case Style	LL2798-2
Connectors	N-type Male

## +RoHS Compliant The +Suffix identifies RoHS Compliance. See our website for methodologies and qualifications

#### **APPLICATIONS**

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

#### **PRODUCT OVERVIEW**

Mini-Circuits' TERM-50W-183N+ is an ultra-wideband  $50\Omega$  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 N-type male connectors, allowing connections with N-type 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**

Features	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: • 25 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 componentry where heat rise is common.



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

Parameter	Condition (GHz)	Min.	Тур.	Max.	Units
Frequency Range	-	DC	-	18	GHz
	DC - 6	19.1	31	-	
Return Loss	6 - 12.4	16.5	28	-	dB
	12.4 - 18	14.7	25	-	
Input Power¹	DC - 18	-	-	50	W

<sup>1.</sup> At 25°C, derate linearly to 20W at 100°C.

#### **ABSOLUTE MAXIMUM RATINGS<sup>2</sup>**

Parameter	Ratings
Operating Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C

<sup>2.</sup> Permanent damage may occur if any of these limits are exceeded.



#### **COAXIAL HIGH POWER**

# Termination

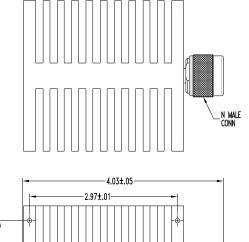
## **TERM-50W-183N+**

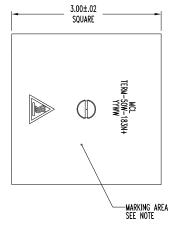
 $50\Omega$   $\,$  50W  $\,$  DC to 18 GHz  $\,$  N-type Male

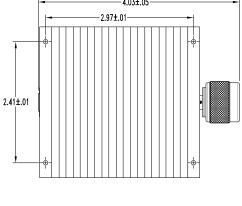
#### **COAXIAL CONNECTIONS**

Input	N-Male
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#### **OUTLINE DRAWING**







Weight: 908 grams (max.)

Dimensions are in inches [mm]. Tolerances: 2 PL. ± .03; 3 PL ± .010



#### **COAXIAL HIGH POWER**

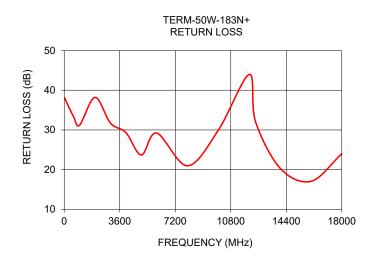
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#### **TYPICAL PERFORMANCE DATA / GRAPHS**

Frequency (MHz)	Return Loss (dB)
10	38.18
600	33.37
1000	31.22
2000	38.20
3000	31.70
4000	29.33
5000	23.69
6000	29.23
8000	20.96
10000	29.98
12000	43.99
12400	32.16
14000	20.36
16000	17.05
18000	24.00



#### 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/terms/viewterm.html

