COAXIAL HIGH POWER

Termination

TERM-50W-183N+

50Ω 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 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 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.	Typ.	Max.	Units
Frequency Range	-	DC	-	18	GHz
Return Loss	DC - 6	19.1	31	-	dB
	6 - 12.4	16.5	28	-	
	12.4 - 18	14.7	25	-	
Input Power[1]	DC - 18	-	-	50	W

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

ABSOLUTE MAXIMUM RATINGS[2]

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

2. Permanent damage may occur if any of these limits are exceeded.

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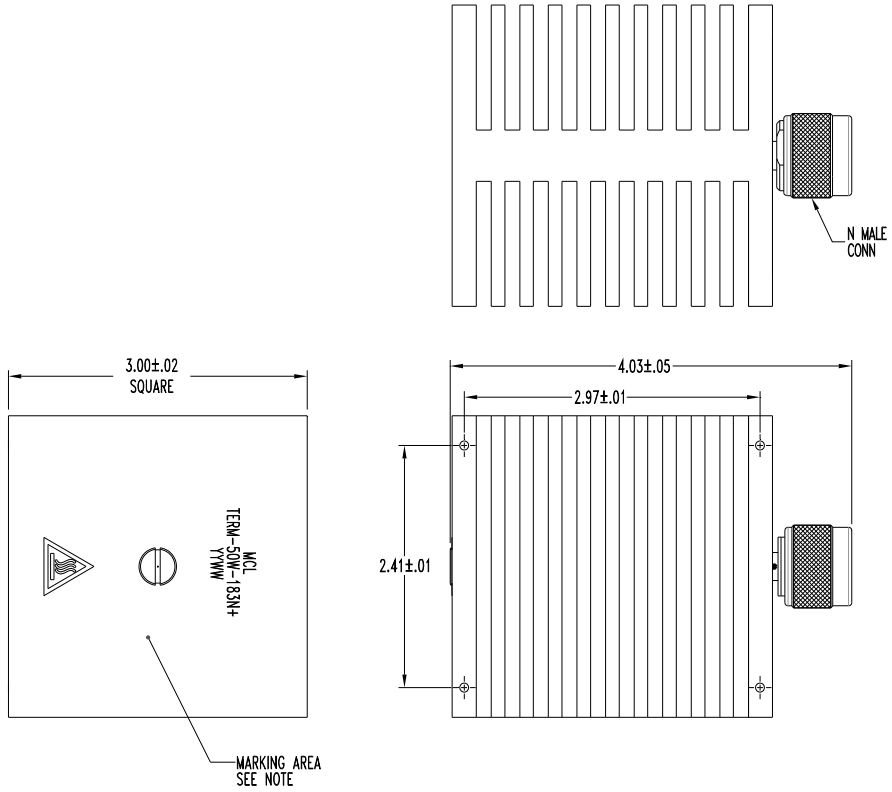
COAXIAL CONNECTIONS

Input	N-Male

OUTLINE DRAWING



Weight: 908 grams (max.)
Dimensions are in inches [mm]. Tolerances: 2 PL. ± .03; 3 PL ± .010

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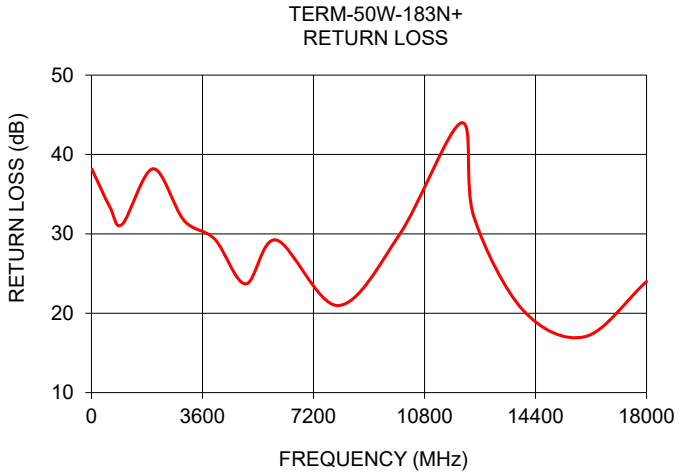
TYPICAL PERFORMANCE DATA / GRAPHS

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

High Power

Termination 50Ω, N-Male TERM-50W-183N+

Typical Performance Data

FREQUENCY (MHz)	RETURN LOSS (dB)
10	38.18
20	38.38
30	38.43
40	38.42
50	38.39
60	38.36
70	38.49
80	38.35
90	38.39
100	38.33
200	37.58
300	36.48
400	35.35
500	34.30
600	33.37
700	32.57
800	31.95
900	31.49
1000	31.22
1500	32.72
2000	38.20
2500	34.56
3000	31.70
3500	30.99
4000	29.33
4500	26.18
5000	23.69
5500	23.95
6000	29.23
6500	36.75
7000	25.37
7500	22.07
8000	20.96
8500	21.25
9000	23.29
9500	27.05
10000	29.98
10500	29.19
11000	29.03
11500	32.27
12000	43.99
12500	30.38
13000	25.14
13500	22.25
14000	20.36
14500	19.10
15000	17.83
15500	16.94
16000	17.05
16500	18.87
17000	21.97
17500	24.20
18000	24.00

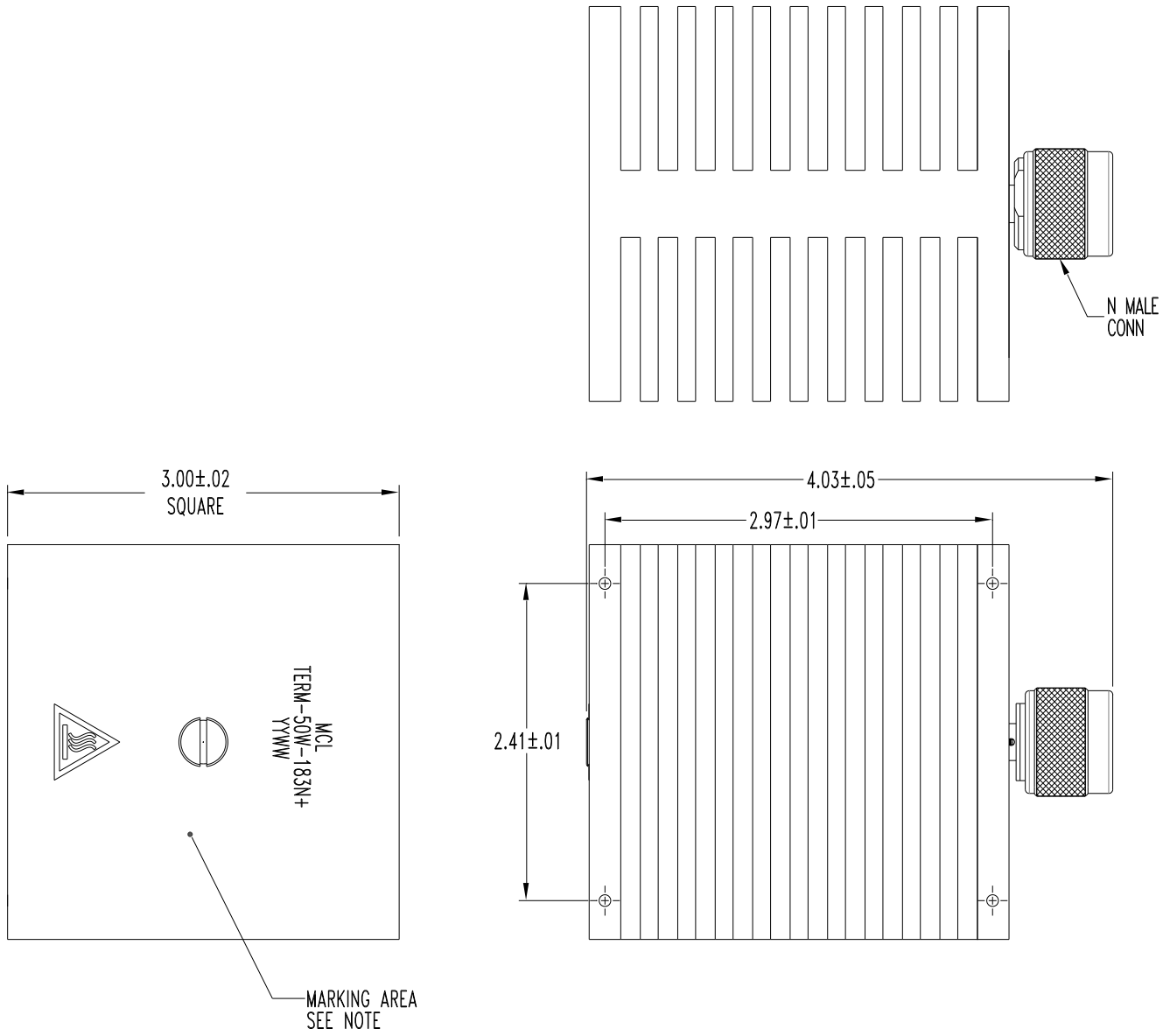
Termination 50Ω, N-Male TERM-50W-183N+

Typical Performance Curves

Case Style LL

Outline Dimensions

LL2798-2



Weight: 908 grams

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .010

Notes:

1. Case Material: Aluminum alloy.
2. Case Finish: Black anodize.

Mini-Circuits

Environmental Specifications **ENV106**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100° C or -55° to 85° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 5 cycles	MIL-STD-202, Method 107, conditionB-3,except over -55° to 100°C
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12