



COAXIAL HIGH POWER

Termination

TERM-25W-183S+

Mini-Circuits

50Ω 25W DC to 18 GHz SMA Male

THE BIG DEAL

- Ultra-Wideband Operation, DC to 18 GHz
- Input Power Handling, 25W
- Excellent Return Loss, 26 dB Typ. up to 18 GHz



Generic photo used for illustration purposes only

Model No.	TERM-25W-183S+
Case Style	LL2798-1
Connectors	SMA 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-25W-183S+ is an ultra-wideband 50Ω high power termination capable of absorbing signals up to 25W 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

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: • 26 dB typ. up to 18 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range
Power Handling up to 25W	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	20.8	34	-	dB
	6 - 12.4	17.7	30	-	
	12.4 - 18	15.5	26	-	
Input Power ¹	DC - 18	-	-	25	W

1. At 25°C, derate linearly to 10W at 100°C.

ABSOLUTE MAXIMUM RATINGS²

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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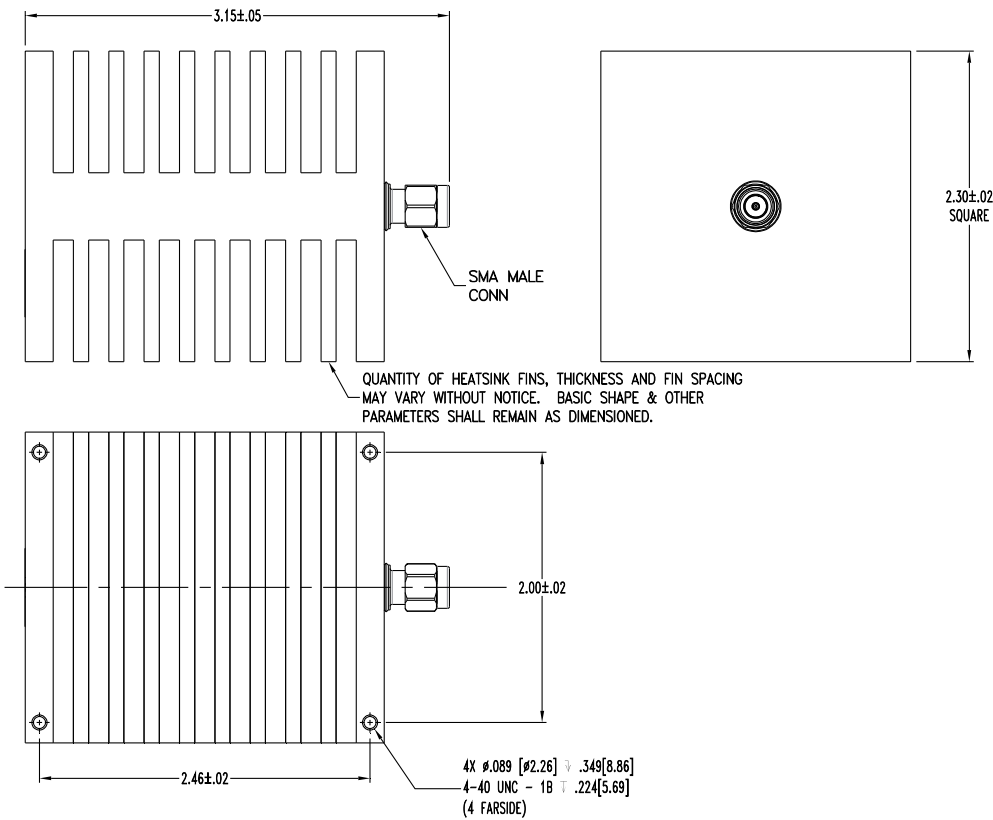
Mini-Circuits

50Ω 25W DC to 18 GHz SMA Male

COAXIAL CONNECTIONS

Input	N-Male
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OUTLINE DRAWING



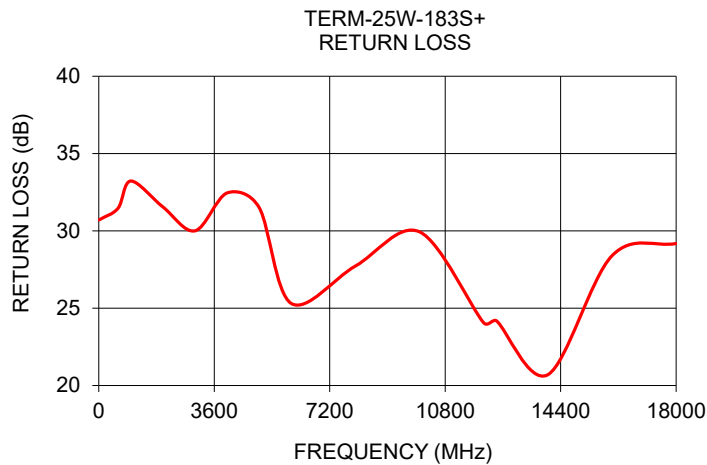
Weight: 409 grams

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



TYPICAL PERFORMANCE DATA / GRAPHS

Frequency (MHz)	Return Loss (dB)
10	30.71
600	31.47
1000	33.22
2000	31.54
3000	30.00
4000	32.45
5000	31.51
6000	25.31
8000	27.73
10000	29.94
12000	24.06
12400	24.18
14000	20.70
16000	28.39
18000	29.18



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, SMA-Male

TERM-25W-183S+

Typical Performance Data

FREQUENCY (MHz)	RETURN LOSS (dB)
10	30.71
20	30.68
30	30.66
40	30.64
50	30.63
60	30.62
70	30.61
80	30.61
90	30.60
100	30.59
200	30.58
300	30.67
400	30.84
500	31.11
600	31.47
700	31.90
800	32.36
900	32.82
1000	33.22
1500	33.40
2000	31.54
2500	30.16
3000	30.00
3500	31.05
4000	32.45
4500	32.63
5000	31.51
5500	28.72
6000	25.31
6500	23.09
7000	22.68
7500	24.26
8000	27.73
8500	30.71
9000	31.24
9500	32.40
10000	29.94
10500	25.82
11000	23.81
11500	23.55
12000	24.06
12500	24.11
13000	23.16
13500	21.66
14000	20.70
14500	21.20
15000	23.95
15500	29.17
16000	28.39
16500	25.99
17000	27.75
17500	39.92
18000	29.18

High Power Termination 50Ω, SMA-Male

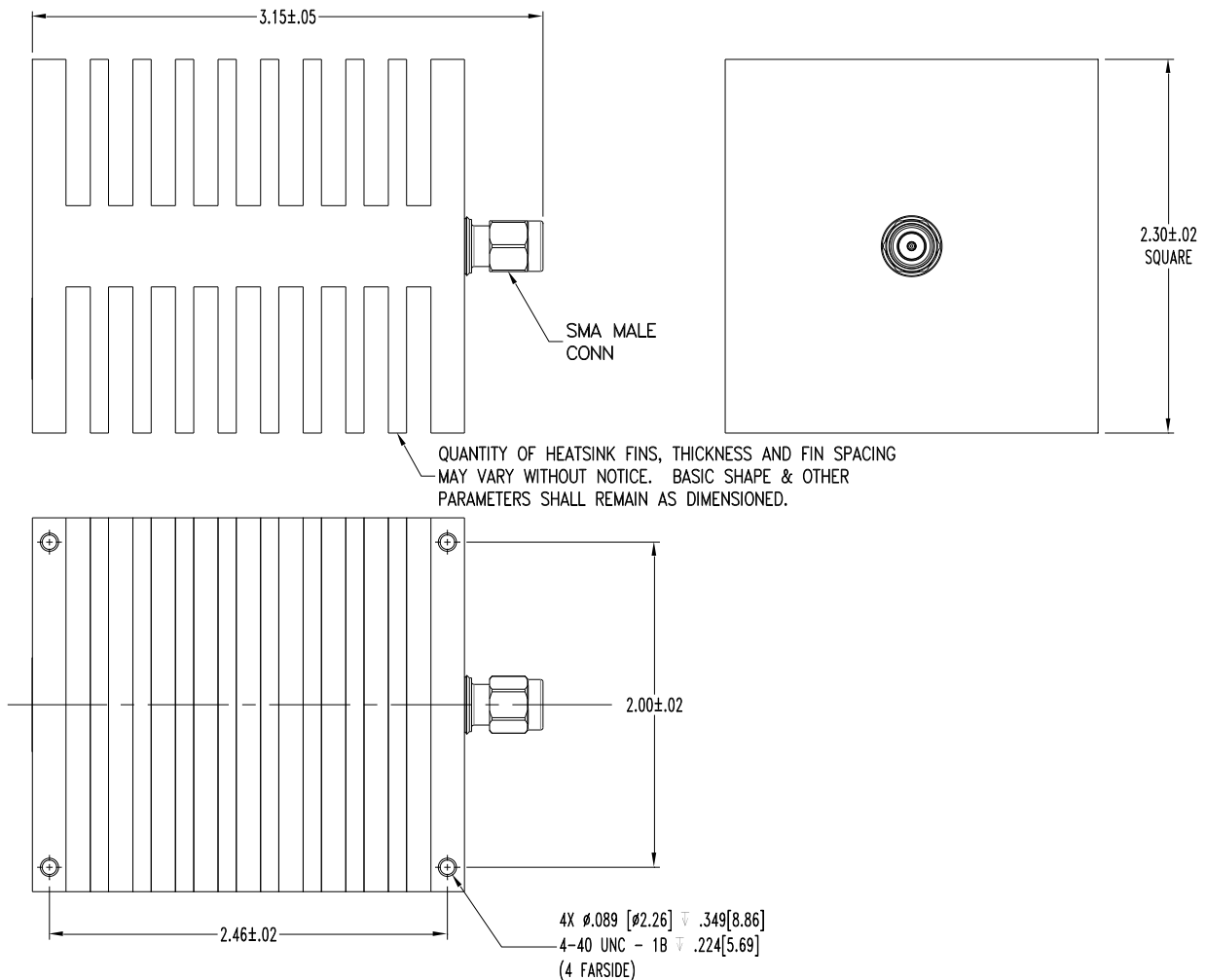
Typical Performance Curves

TERM-25W-183S+



Outline Dimensions

LL2798-1



Weight: 409 grams

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

Notes:

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

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ISO 9001 ISO 14001 CERTIFIED

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RF/IF MICROWAVE COMPONENTS



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