COAXIAL

Termination

TERM-250W-83N+

250W DC to 8000 MHz N-Male

THE BIG DEAL

- Wideband Operation, DC to 8000 MHz
- High Power Handling, 250W
- Excellent VSWR, 1.09 Typ.

Generic photo used for illustration purposes only

APPLICATIONS

- Test and Measurement Equipment
- LTE & 5G MIMO Infrastructure
- Satellite Communications
- Radar, EW, and ECM Defense Systems

Model No.	TERM-250W-83N+
Case Style	GH3249-1
Connectors	N-Male

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

PRODUCT OVERVIEW

Mini-Circuits' TERM-250W-83N+ is a coaxial termination providing high power handling of up to 250W over the DC to 8 GHz frequency range. This model supports many of high-power applications over a broad frequency range including high-power measurement, instrumentation, and more with excellent return loss. It provides excellent VSWR (1.09 typ.) and excellent thermal stability from -55 to 125 ˚C. It features rugged construction with N-male connector and heat dissipation fins for efficient cooling.

KEY FEATURES

Features	Advantages
Wideband Operation, DC to 8000 MHz	Wide frequency range makes the TERM-250W-83N+ suitable for a wide variety of applications.
High power handling to 250W	Supports high-power test lab and system applications by protecting sensitive test equipment that is often damaged when exposed to high RF input power.
Excellent VSWR, 1.09:1 typ.	Well-matched for 50Ω systems; reduces effects of phase variation
Rugged construction	Excellent durability for a long lifetime of use
Wide operating temperature range, -55 to 125 ˚C	Designed with heat dissipation fins for efficient cooling, the TERM-250W-83N+ provides reliable performance over extreme operating conditions. Note: See max power derating at high temperature.

REV. OR
ECO-016158
TERM-250W-83N+
MCL NY
230105

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range	-	DC	-	8000	MHz
VSWR	DC-2000	-	1.04	-	:1
	2000-4000	-	1.09	-	
	4000-6000	-	1.12	-	
	6000-8000	-	1.09	-	
Input Power (N-Male)[1]	DC-8000	-	-	250	W

1. Max. input power at 25°C ambient, derate to 25W at 125°C.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55 °C to +125 °C
Storage Temperature	-55 °C to +125 °C
Input Power (N-Male)	250 Watt
Input Peak Power[2]	1000 Watt

1. Permanent damage may occur if any of these limits are exceeded.
2. Peak power <5 µSEC. PW, /<0.1% duty cycle.

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COAXIAL CONNECTIONS

Input	N-Male

CONNECTOR SPECIFICATIONS

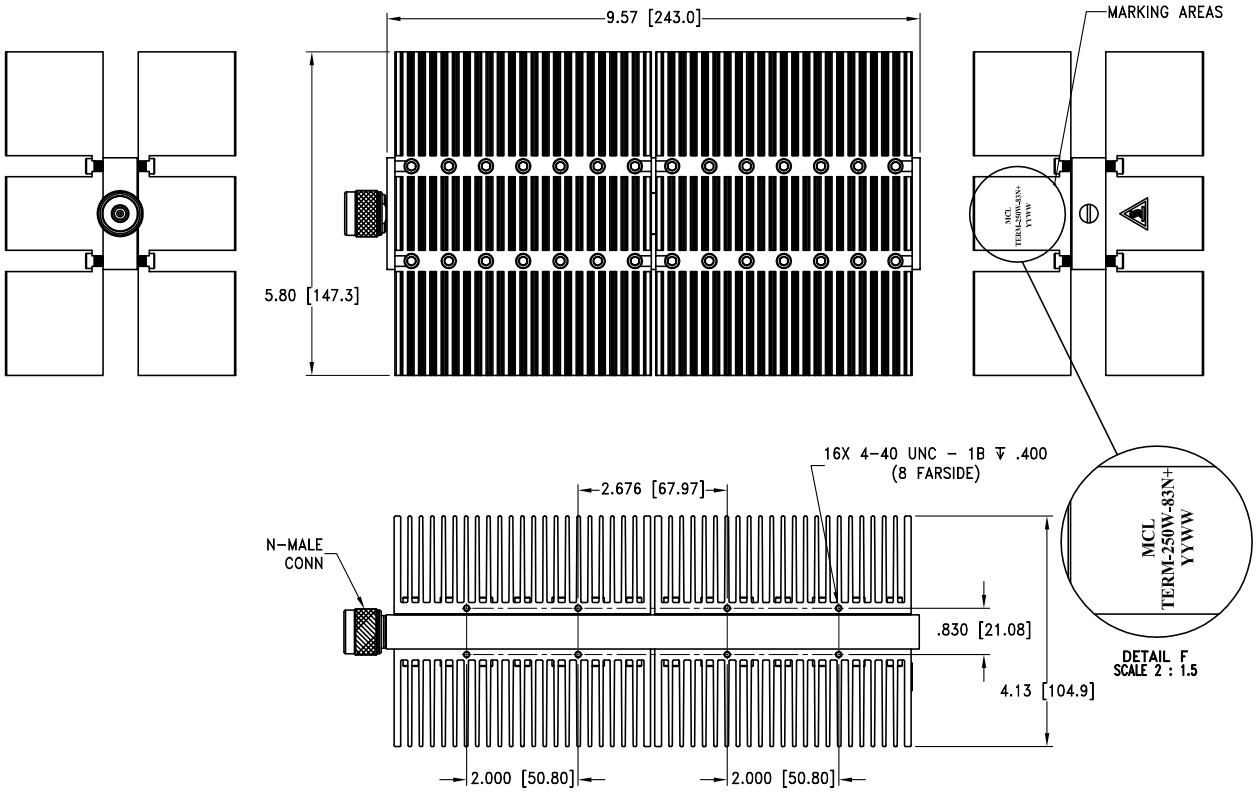
Description	Connector
Type	N-Male
Orientation	Straight
Mounting Type	Standard
Impedance	50 Ω
Coupling Nut	Stainless Steel, Silver Plated
Center Contact	BeCu, Silver Plated

MECHANICAL SPECIFICATIONS

Housing	Aluminum Alloy, Chemical Conversion Coat
Heat Sinks	Aluminum Alloy, Black Anodize Finish (0.5°C/Watt)[1]
Internal Resistive Elements	Beryllium Oxide Or Aluminum Nitride Ceramic With Thick Film And/Or Thin Film Resistor

1. Heat sink thermal rise (calculated)

OUTLINE DRAWING



Weight (MAX.): 3820 grams

Dimensions are in inches (mm). Tolerances: 2 Pl.±.05[1.27]; 3 PL ±.030[.77]

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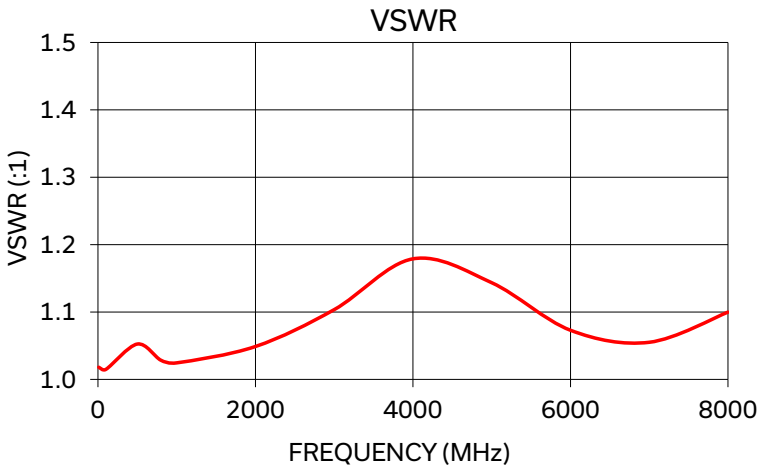
TYPICAL PERFORMANCE CURVE



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

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