

**THE BIG DEAL**

- BNC-Male Connector
- Excellent Return Loss, 26 dB typ.
- Wide Frequency Range, up to 4 GHz



Generic photo used for illustration purposes only

Model No.	BTRM-50+
Case Style	LL85
Connectors	BNC-Male

**+RoHS Compliant**

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

**APPLICATIONS**

- Cellular Communications
- Satellite Communications
- Test Setup

**PRODUCT OVERVIEW**

Mini-Circuits' BTRM-50+ is a wideband 50Ω termination capable of absorbing signals up to 0.5W from DC to 4 GHz. This model provides excellent return loss across its entire operating frequency range, effectively dissipating power with minimal signal reflection. The unit features a BNC-Male connector with rugged construction for a long life of use and comes in a Tri-metal plated brass case measuring only 1.46 (l) x 0.58" (dia.)

**KEY FEATURES**

Features	Advantages
Wideband, DC to 4 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good Return Loss, 26 dB typ.	Good return loss minimizes signal reflections across multiple-decade frequency range.
BNC-Male Connector	Provides termination for assemblies using BNC connector types without the need for additional adapters.
Power Handling up to 0.5W	BTRM-50+ meets a wide range of system power requirements in a small device size.
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.



## ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	4	GHz
Impedance		50			Ohms
Return Loss	DC - 0.5	40	—	—	dB
	0.5 - 1	30	—	—	
	1 - 2	21	—	—	
	2 - 4	20	—	—	
Input Power <sup>1</sup>	DC - 4	—	0.5	—	W

1. At 70°C, derate linearly at 5mW/°C to 350mW at 100°C.

ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

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

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



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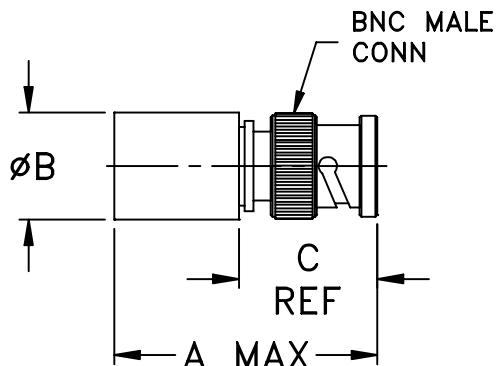
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# Termination

**BTRM-50+**

50Ω DC to 4 GHz BNC Male

## OUTLINE DRAWING



## OUTLINE DIMENSIONS (Inch mm)

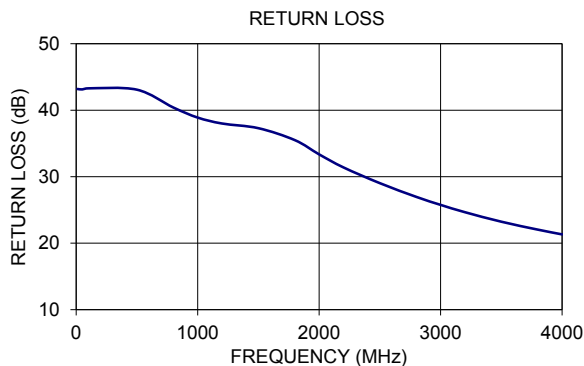
A	B	D	wt
1.46	.58	.75	grams
37.08	14.73	19.05	21.5



# Termination

**TYPICAL PERFORMANCE DATA**

Frequency (MHz)	Return Loss (dB)
10	43.19
100	43.29
500	43.09
800	40.40
1000	38.89
1500	37.29
1800	35.50
2000	33.36
2500	29.03
2800	26.96
3000	25.76
3500	23.23
4000	21.32

**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](http://www.minicircuits.com/terms/viewterm.html)