

Termination BNC

BTRM-50CN+

50Ω

DC to 4 GHz

The Big Deal

- BNC-Male connector
- Excellent return loss, 26 dB typ.
- Built-in chain to attach to equipment rack



CASE STYLE: LL1188

Product Overview

Mini-Circuits' BTRM-50CN+ 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 case measuring only 1.46 (l) x 0.58" (dia.)

Key Features

| Feature | 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-50CN+ 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. |

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/MCLStore/terms.jsp



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Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |

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

Features

- wideband, DC to 4 GHz
- return loss, 39 dB typ. up to 1 GHz
- rugged construction

Applications

- cellular communications
- satellite communications
- test set-up

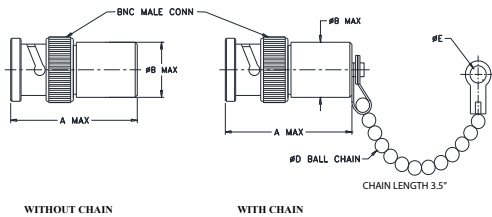


Generic photo used for illustration purposes only
CASE STYLE: LL1188

| Connectors | Model |
|------------|------------|
| BNC-Male | BTRM-50CN+ |

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

Outline Drawing



Outline Dimensions (inch/mm)

| A | B | D | E | wt grams. |
|-------|-------|-------|-----|------------|
| 1.46 | .58 | 0.126 | .15 | with chain |
| 37.08 | 14.73 | 3.20 | 3.8 | 17.4 20.2 |

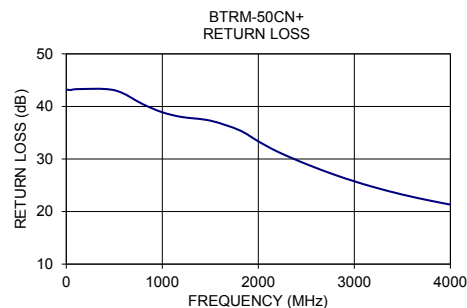
Electrical Specifications at 25°C

| Parameter | Condition (GHz) | Min. | Typ. | Max. | Unit |
|--------------------------|-----------------|------|------|------|------|
| Frequency Range | | DC | — | 4 | GHz |
| Impedance | | | 50 | | Ohms |
| Return Loss | DC - 0.5 | 40 | 43 | — | dB |
| | 0.5 - 1 | 35 | 41 | — | |
| | 1 - 2 | 30 | 37 | — | |
| | 2 - 4 | 20 | 26 | — | |
| Input Power ¹ | DC - 4 | — | 0.5 | — | W |

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

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 |



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