



COAXIAL

Termination

LOUIS-50

Mini-Circuits®

50Ω DC to 2000 MHz DIN Male w/retaining sleeve

FEATURES

- Wideband Coverage, DC to 2000 MHz
- Return Loss, 33 dB typ. up to 1000 MHz and 27 dB typ. 10000 to 2000 MHz

*Generic photo used for illustration purposes only***APPLICATIONS**

- Cellular Communications
- Satellite Communications
- Test Setup

| | |
|------------|-----------------------------|
| Model No. | LOUIS-50 |
| Case Style | LL987 |
| Connectors | DIN Male w/retaining sleeve |

ELECTRICAL SPECIFICATIONS (T_{AMB} = 25°C)

| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Units |
|---------------------------|-----------------|------|------|-------|-------|
| Frequency Range | | DC | | 2000 | MHz |
| Impedance | | | 50 | | Ohms |
| Return Loss | DC - 500 | 28 | — | — | dB |
| | DC - 1000 | 28 | — | — | |
| | DC - 2000 | 21 | — | — | |
| Power Rating ¹ | DC - 2000 | — | — | 0.125 | W |

1. Up to 70°C, derate linearly to 80% at 85°C

ABSOLUTE MAXIMUM RATINGS¹

| Parameter | Ratings |
|-----------------------|-----------------|
| Operating temperature | -42°C to +85°C |
| Storage temperature | -55°C to +100°C |

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

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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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ECO-016503
LOUIS-50
MCL NY
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PAGE 1 OF 3



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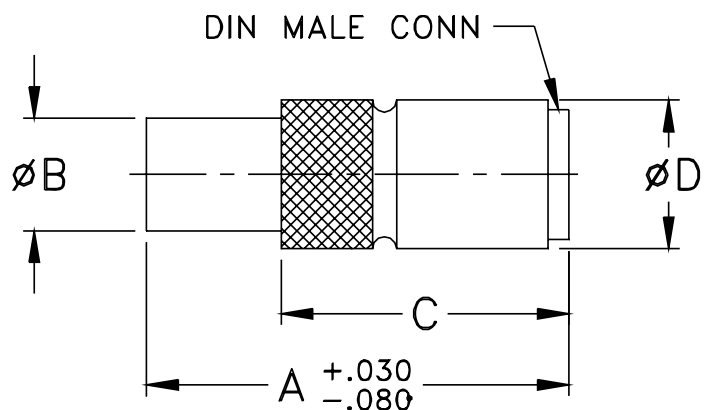
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OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

| A | B | C | D | wt |
|-------|------|-------|------|-------|
| 0.94 | 0.25 | 0.64 | 0.33 | grams |
| 23.88 | 6.35 | 16.26 | 8.38 | 6.50 |

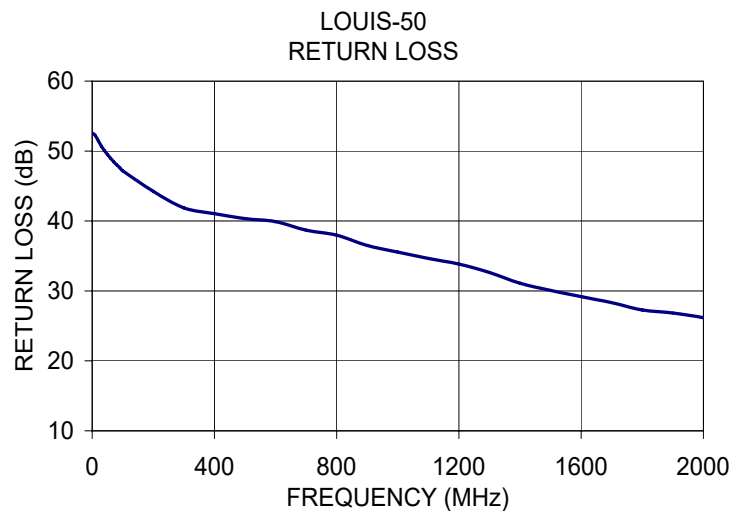


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TYPICAL PERFORMANCE DATA

| Frequency (MHz) | Return Loss (dB) |
|-----------------|------------------|
| 1.00 | 52.55 |
| 20.00 | 51.45 |
| 40.00 | 50.07 |
| 70.00 | 48.50 |
| 100.00 | 47.17 |
| 300.00 | 41.88 |
| 500.00 | 40.34 |
| 700.00 | 38.69 |
| 1000.00 | 35.56 |
| 1200.00 | 33.84 |
| 1300.00 | 32.63 |
| 1500.00 | 30.08 |
| 1700.00 | 28.32 |
| 1900.00 | 26.84 |
| 2000.00 | 26.18 |

**NOTES**

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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

Typical Performance Data

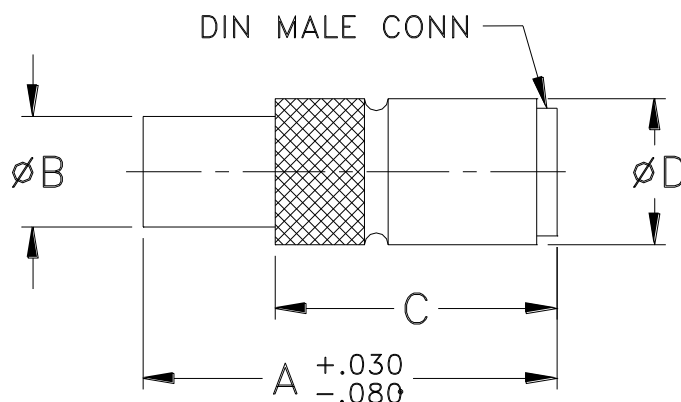
| FREQUENCY (MHz) | RETURN LOSS (dB) |
|--------------------|---------------------|
| 1 | 52.55 |
| 20 | 51.45 |
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Typical Performance Curves



Outline Dimensions

LL987



| CASE # | A | B | C | D | WT GRAMS |
|--------|----------------|---------------|----------------|---------------|----------|
| LL987 | .94 (23.88) | .25 (6.35) | .64 (16.26) | .33 (8.38) | 6.5 |

Dimensions are in inches (mm). Tolerances: 2Pl. $\pm .03$; 3Pl. $\pm .015$

Notes:

1. Case Material: Brass.
2. Case Finish: Nickel plate.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

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 | -40° to 85°C | Individual Model Data Sheet |
| Storage Temperature | -55° to 100° C Ambient Environment | Individual Model Data Sheet |
| Barometric Pressure | 100,000 Feet | MIL-STD-202, Method 105, Condition D |
| Humidity | 90% RH, 65°C Units may require bake-out after humidity to restore full performance. | MIL-STD-202, Method 103 |
| Thermal Shock | -65° to 125°C, 5 cycles | MIL-STD-202, Method 107, Condition B |
| Vibration (High Frequency) | 20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36) | MIL-STD-202, Method 204, Condition D |
| Mechanical Shock | 100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18) | MIL-STD-202, Method 213, Condition I |