



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., 1000 to 2000 MHz
- Stainless Steel Construction



Generic photo used for illustration purposes only

Model No.	LOUIS-50
Case Style	LL987
Connectors	DIN Male w/ Retaining Sleeve

### APPLICATIONS

- Cellular Communications
- Satellite Communications
- Test Setup

### ELECTRICAL SPECIFICATIONS (T<sub>AMB</sub> = +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 <sup>1</sup>	DC-2000	-	-	0.125	W

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

### ABSOLUTE MAXIMUM RATINGS<sup>2</sup>

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

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



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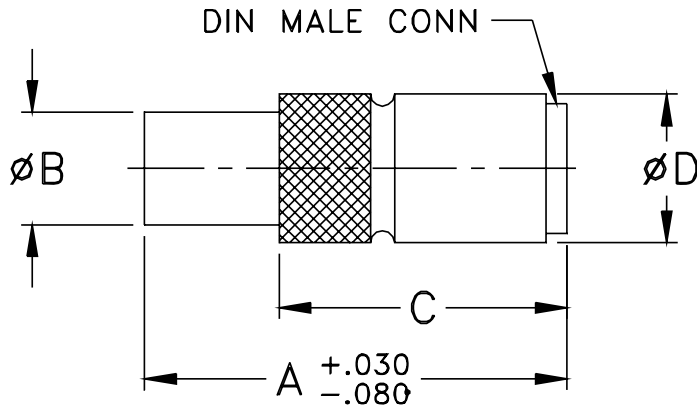
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## OUTLINE DRAWING



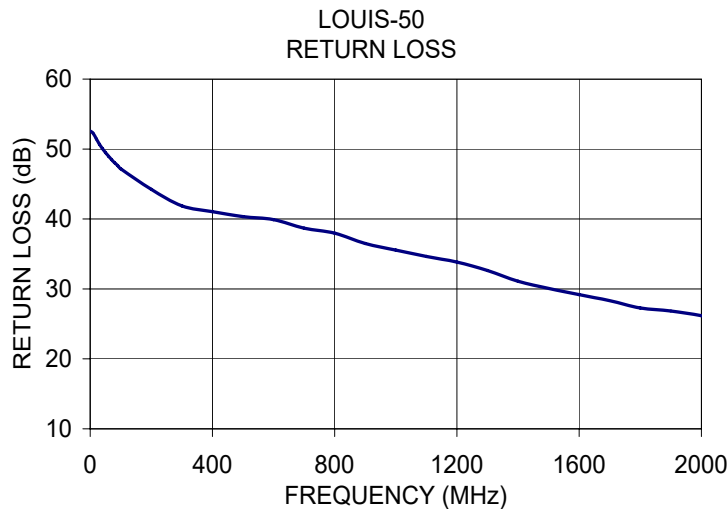
## OUTLINE DIMENSIONS ( $\frac{\text{Inch}}{\text{mm}}$ )

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



## 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



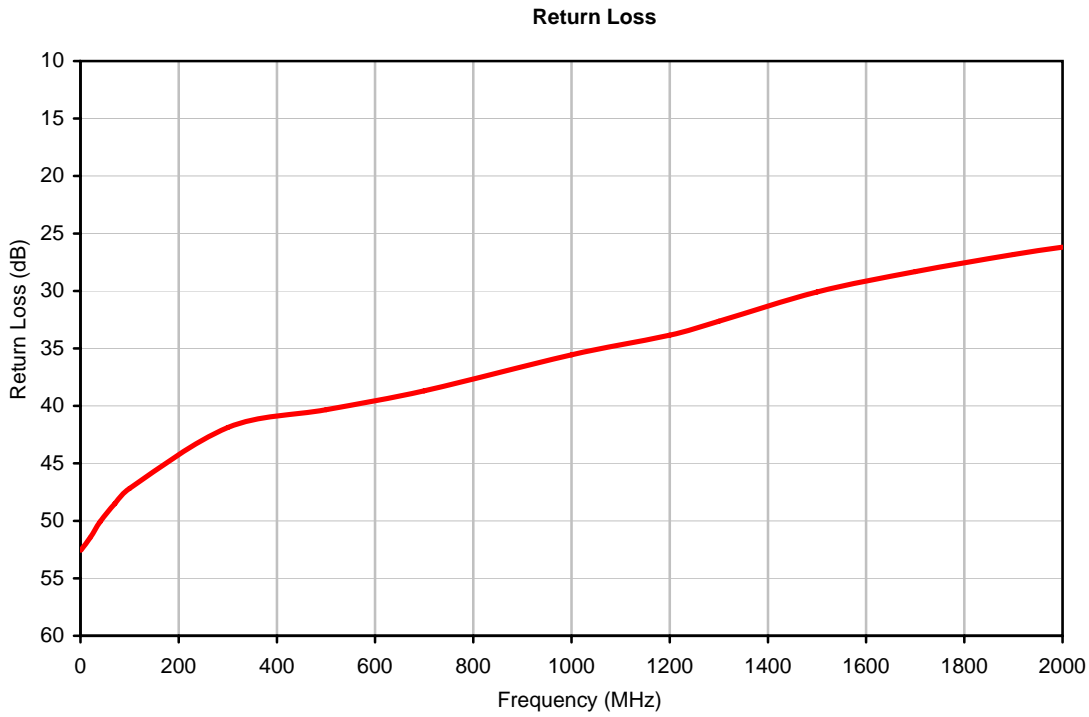
## NOTES

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

## Typical Performance Data

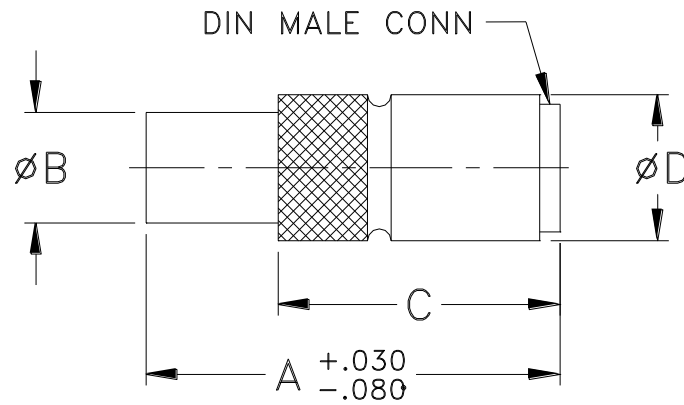
FREQUENCY (MHz)	RETURN LOSS (dB)
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1200	33.84
1300	32.63
1500	30.08
1700	28.32
1900	26.84
2000	26.18

## 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](http://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