

50Ω

DC to 6 GHz

The Big Deal

- Wideband, DC to 6 GHz
- Excellent return loss, 35 dB typ. up to 6 GHz
- Input power handling up to 1W



CASE STYLE: LL561

Product Overview

Mini-Circuits' ANNE-50RP+ is wideband 50Ω termination capable of absorbing signals up to 1W from DC to 6 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a SMA-Male Reverse Polarity connector. The unit features rugged construction for a long life of use and measuring only 0.58" (l) x 0.37" (dia.).

Key Features

Feature	Advantages
Wideband, DC to 6 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broad-band and multi-band use.
Good return loss 35 dB typ. up to 6 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
Power handling up to 1W	ANNE-50RP+ meets a wide range of system power requirements in a small device size.
Wide operating temperature range, -55°C 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

Coaxial Termination SMA-MRP

ANNE-50RP+

50Ω DC to 6 GHz

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 coverage, DC to 6 GHz
- Return loss, 35 dB typ. up to 6 GHz
- Rugged construction



CASE STYLE: LL561
Connector Model
SMA-MRP ANNE-50RP+

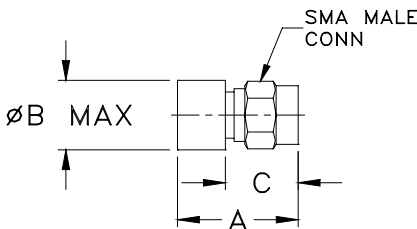
+RoHS Compliant

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

Applications

- Cellular communications
- Satellite communications
- Test set-up
- Defense & radar

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	Wt.
.58	.37	.35	grams
14.73	9.40	8.89	4.0

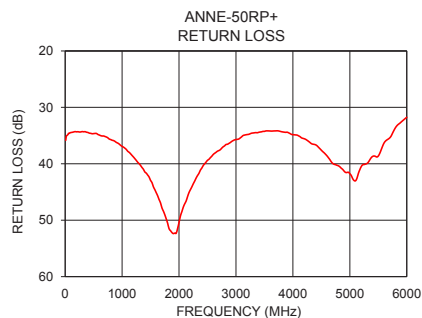
Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range	DC-6	-	-	-	GHz
Impedance	50	-	-	-	Ohms
Return Loss	DC-3	23	35	-	dB
	3-6	20	35	-	
Input Power ¹	DC-6	-	-	1.0	W

1. At 50°C, derate linearly to 350mW at 100°C.

Typical Performance Data

Frequency (MHz)	Return Loss (dB)
10	35.85
100	34.46
200	34.34
400	34.45
500	34.65
750	35.40
1000	36.92
1500	42.95
2000	50.40
2500	39.39
2750	37.23
3000	35.71
3250	34.68
3500	34.26
4000	34.84
4500	37.60
5000	41.76
5500	38.62
5750	34.58
6000	31.76



Notes

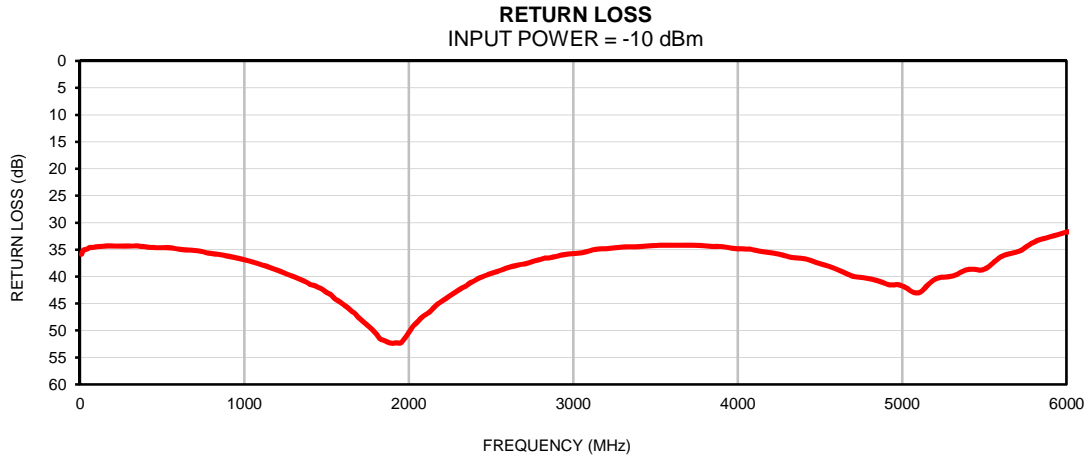
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Typical Performance Data

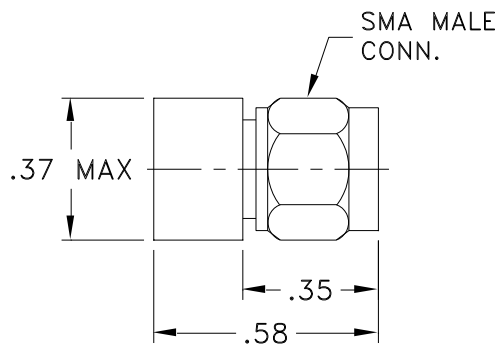
FREQ.	RETURN LOSS
(MHz)	(dB)
10	35.85
100	34.46
200	34.34
300	34.30
400	34.45
500	34.65
600	34.90
700	35.17
800	35.71
900	36.22
1000	36.92
1100	37.79
1200	38.80
1300	39.99
1400	41.46
1500	42.95
1600	45.13
1700	47.82
1800	50.54
1900	52.38
2000	50.40
2100	47.10
2200	44.59
2300	42.54
2400	40.77
2500	39.39
2600	38.36
2700	37.66
2800	36.83
2900	36.24
3000	35.71
3100	35.22
3200	34.82
3300	34.55
3400	34.42
3500	34.26
3600	34.19
3700	34.17
3800	34.32
3900	34.40
4000	34.84
4100	35.05
4200	35.56
4300	36.23
4400	36.64
4500	37.60
4600	38.61
4700	39.94
4800	40.36
4900	41.31
5000	41.76
5100	43.01
5200	40.51
5300	39.96
5400	38.70
5500	38.62
5600	36.33
5700	35.42
5800	33.63
6000	31.76

Typical Performance Curves

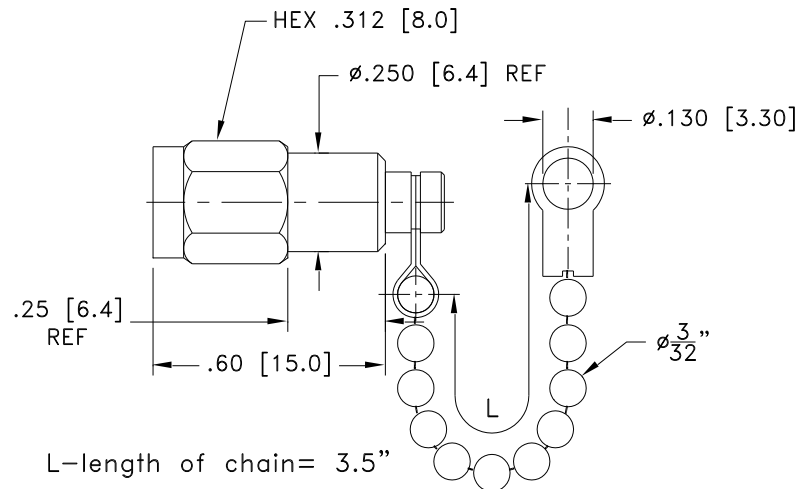


Outline Dimensions

LL561



WITHOUT CHAIN



WITH CHAIN

CASE #	WT GRAMS
LL561	4.0
LL561 WITH CHAIN	5.00

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

Notes:

1. Case Material: Brass.
2. Case Finish: Gold plate.
3. For polarity of connector refer individual model data sheet.



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	-55° to 100°C Ambient Environment	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