



COAXIAL

Termination, SMA-M

ANNE-50+

Mini-Circuits

50Ω DC to 18000 MHz

THE BIG DEAL

- Wideband coverage, DC to 18000 MHz
- Return loss, 35 dB typ. up to 4000 MHz and 27 dB typ. 10000 to 18000 MHz
- Rugged construction



Generic photo used for illustration purposes only

| | |
|------------|----------|
| Model No. | ANNE-50+ |
| Case Style | LL561 |
| Connectors | SMA-Male |

APPLICATIONS

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

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT 25°C

| Parameter | Frequency (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | | DC | | 18 | GHz |
| Impedance | | | 50 | | Ohms |
| Return Loss | DC - 4 | 30 | — | — | dB |
| | 4 - 8 | 27 | — | — | |
| | 8 - 12 | 23 | — | — | |
| | 12 - 18 | 21 | — | — | |
| Power Rating* | DC - 18 | — | — | 1 | W |

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

MAXIMUM RATINGS

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

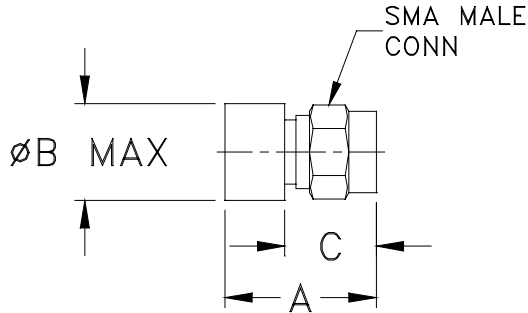
Permanent damage may occur if any of these limits are exceeded.





Termination, SMA

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch/mm)

| A | B | C | wt |
|-------|------|------|-------|
| Inch | Inch | Inch | grams |
| 0.58 | 0.37 | 0.35 | 4.0 |
| 14.73 | 9.40 | 8.89 | |

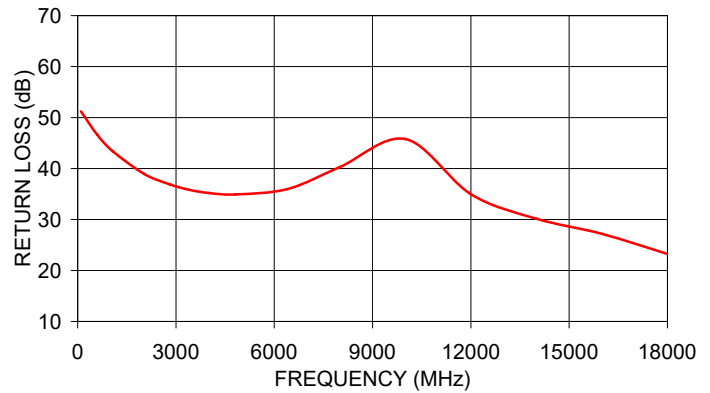


To order ANNE-50+ with 3½ length chain and end coupling with .130" diameter mtg. hole, use part no. [ANNE-50CN+](#)

TYPICAL PERFORMANCE DATA

| Frequency (MHz) | Return Loss (dB) |
|-----------------|------------------|
| 596 | 46.64 |
| 1072 | 43.38 |
| 2024 | 38.95 |
| 2800 | 36.93 |
| 3400 | 35.82 |
| 4000 | 35.20 |
| 4800 | 34.92 |
| 6400 | 35.97 |
| 8000 | 40.29 |
| 10000 | 45.79 |
| 12000 | 34.97 |
| 14000 | 30.16 |
| 16000 | 27.19 |
| 18000 | 23.24 |

ANNE-50+ RETURN LOSS



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

Typical Performance Data

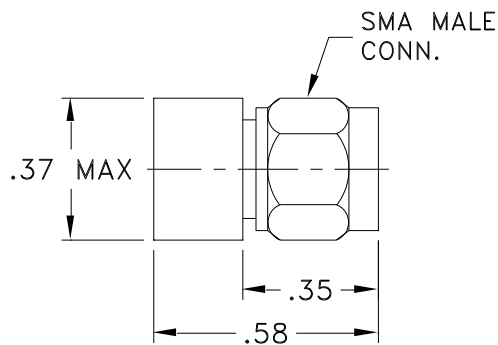
| FREQUENCY (MHz) | RETURN LOSS (dB) |
|--------------------|---------------------|
| 100 | 51.21 |
| 596 | 46.64 |
| 1072 | 43.38 |
| 2024 | 38.95 |
| 2800 | 36.93 |
| 3400 | 35.82 |
| 4000 | 35.20 |
| 4800 | 34.92 |
| 6400 | 35.97 |
| 8000 | 40.29 |
| 10000 | 45.79 |
| 12000 | 34.97 |
| 14000 | 30.16 |
| 16000 | 27.19 |
| 18000 | 23.24 |

Typical Performance Curves

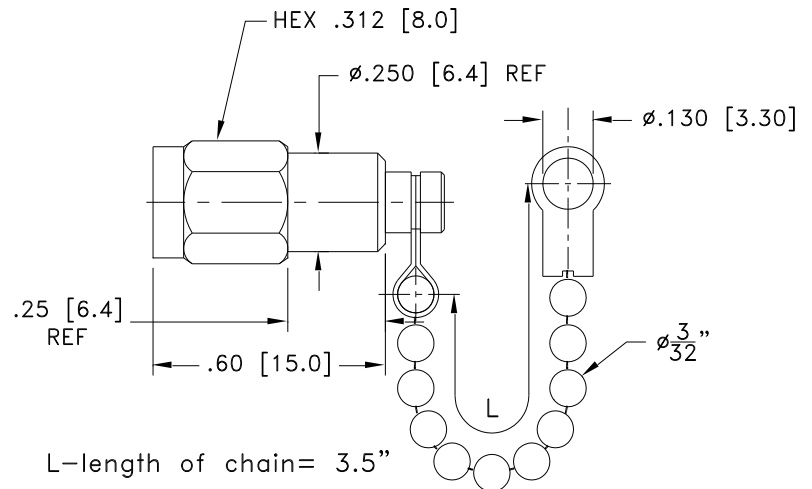


Outline Dimensions

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 |