



2W/5 dB Fixed Attenuator, N Male to N Female Brass Nickel Body Up to 18 GHz

RF Fixed Attenuators Technical Data Sheet

LCAT1007-05

Features

- Attenuation accuracy 5 ± 0.6 dB
- Frequency range from DC to 18 GHz
- Operating temp range from -55 to 125°C
- VSWR < 1.40:1
- Input Power 2W max

Applications

- Production systems
- Prototyping and characterization
- RF test systems
- Instrumentation
- Precision measurements

Description

L-com carries a wide range of fixed attenuators with a broad selection of attenuation levels and frequency ranges. RF fixed attenuators lower the amplitude of a signal (attenuate) by specific amount and can be used in a wide variety of applications. These attenuators are used when signal levels need to be reduced to protect measurement equipment or other circuitry, to extend the range of power meters and amplifiers, and to impedance match circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to optimal power range.

Few RF components are as commonly used as fixed coaxial attenuators, and L-com carries one of the largest in-stock varieties and ships them same day. The 5 dB Fixed Attenuator LCAT1007-05 is rated to 2 Watts and operates from DC to 18 GHz. The versatile coaxial package uses type N male to type N female connectors and is also RoHS compliant.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 18 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 5 | | dB |
| Attenuation Accuracy | | 0.6 | | dB |
| VSWR | | | 1.4:1 | |
| Input Power, Peak | | | 500 | Watts |
| Input Power, CW | | | 2 | Watts |
| derated linearly to 0.5W @ 125°C | | | | |

Electrical Specification Notes:
0.5KW (5 μ s pulse with 0.4% duty cycle)

Mechanical Specifications

Size

| | |
|---------------------------|---------------------|
| Length | 3.03 in [76.96 mm] |
| Width/Diameter | 0.787 in [19.99 mm] |
| Weight | 0.176 lbs [79.83 g] |
| Body Material and Plating | Aluminum |

Configuration

| | |
|---------------|----------------------|
| Design | Fixed |
| Package Style | Connectorized Module |



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Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|---------------|------------------------|
| Type | N Male | N Female |
| Contact Material and Plating | Brass, Gold | Beryllium Copper, Gold |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Body Material and Plating | | Brass, Nickel |

Environmental Specifications

Temperature

Operating Range

-55 to +125 deg C

Compliance Certifications

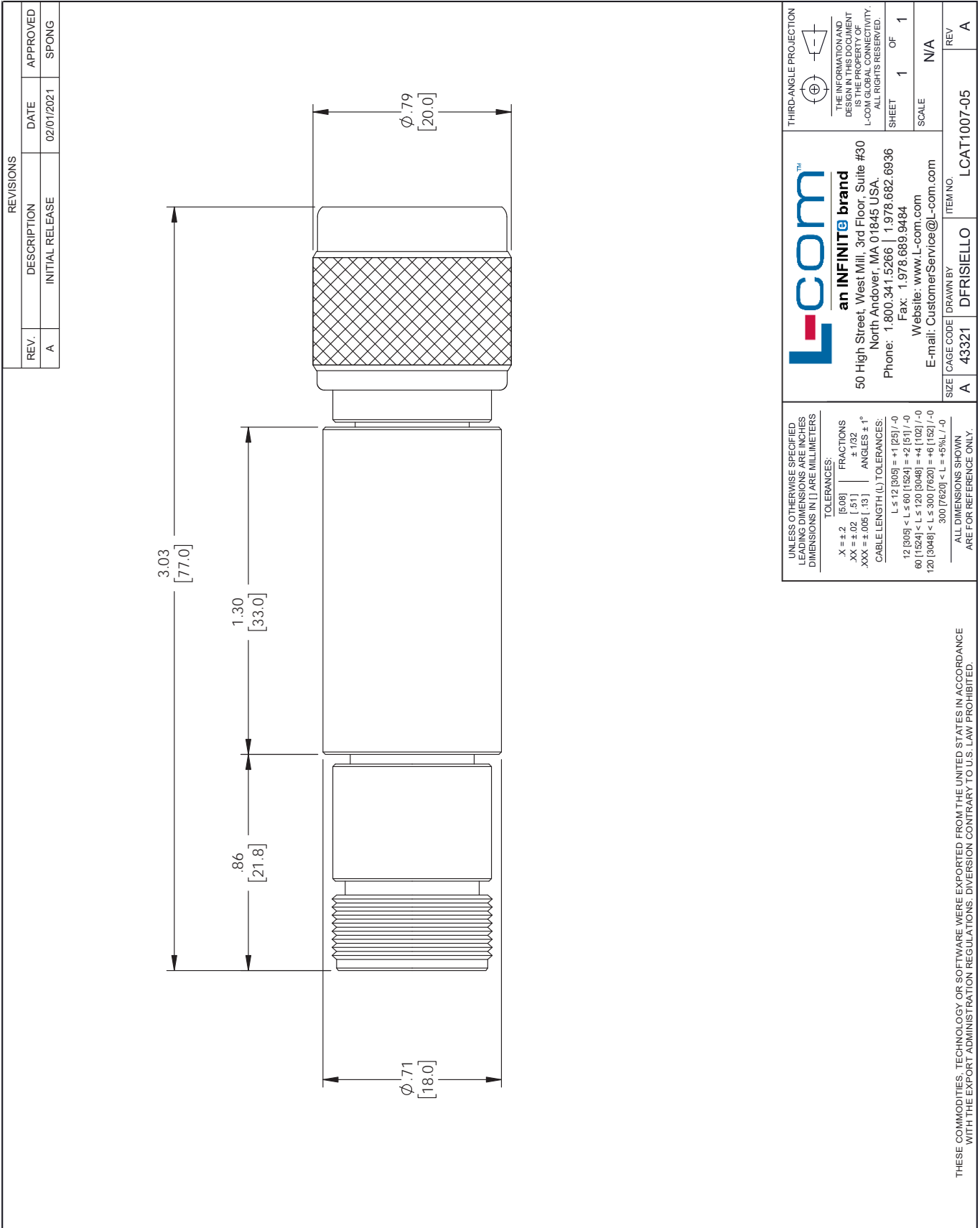
Plotted and Other Data

Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume any liability arising out of the use of any part or documentation.

L-CAT1007-05 CAD Drawing

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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 X = ±.2 [5.08]
 XX = ±.02 [.51]
 XXX = ±.005 [.13]
 ANGLES ± 1°
 CABLE LENGTH (L) TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

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