

## 2W/3 dB Fixed Attenuator, SMA Male to SMA Female Stainless Steel Body Up to 18 GHz



### LCAT1005-03

#### Features

- Input Power 2W max
- Attenuation accuracy  $3 \pm 0.5$  dB
- Frequency range from DC to 18 GHz
- Operating temp range from -55 to 125°C
- VSWR < 1.30:1

#### Applications

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

#### 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 3 dB Fixed Attenuator LCAT1005-03 is rated to 2 Watts and operates from DC to 18 GHz. The versatile coaxial package uses SMA male to SMA female connectors and is also RoHS compliant.

#### Electrical Specifications

| Description                      | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|-------|
| Frequency Range                  | DC      |         | 18      | GHz   |
| Impedance                        |         | 50      |         | Ohms  |
| Nominal Attenuation              |         | 3       |         | dB    |
| Attenuation Accuracy             |         | 0.5     |         | dB    |
| VSWR                             |         |         | 1.3:1   |       |
| Input Power, CW                  |         |         | 2       | Watts |
| derated linearly to 0.5W @ 125°C |         |         |         |       |
| Input Power, Peak                |         |         | 500     | Watts |

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

#### Mechanical Specifications

##### Size

|                           |                     |
|---------------------------|---------------------|
| Length                    | 0.85 in [21.59 mm]  |
| Width/Diameter            | 0.312 in [7.92 mm]  |
| Weight                    | 0.0088 lbs [3.99 g] |
| Body Material and Plating | Stainless Steel     |

##### Configuration

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

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#### Connectors

| Description                       | Connector 1     | Connector 2            |
|-----------------------------------|-----------------|------------------------|
| Type                              | SMA Male        | SMA Female             |
| Contact Material and Plating      | Brass, Gold     | Beryllium Copper, Gold |
| Coupling Nut Material and Plating | Stainless Steel |                        |
| Hex Size                          | 5/16 inch       |                        |
| Body Material and Plating         | Stainless Steel | Stainless Steel        |

#### Environmental Specifications

##### Temperature

Operating Range -55 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

#### Typical Performance Data

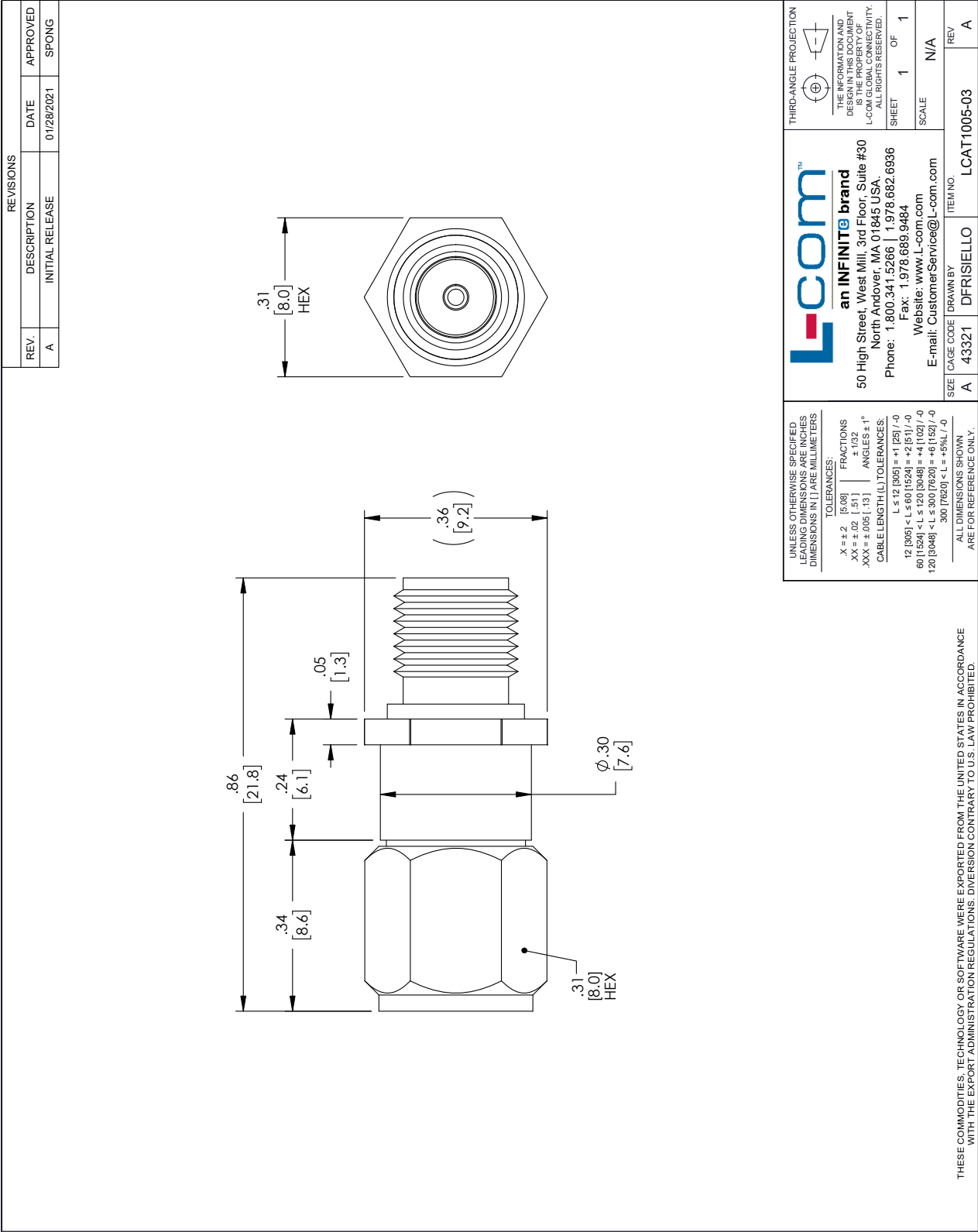
2W/3 dB Fixed Attenuator, SMA Male to SMA Female Stainless Steel Body Up to 18 GHz from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/2w-3-db-fixed-attenuator-sma-male-sma-female-stainless-steel-body-up-18-ghz-lcat1005-03-p.aspx>

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LCAT1005-03 CAD Drawing

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T-Rev D