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2W/1dB RF Fixed Attenuator, SMA Male to SMA Female Brass Gold Body Up to 3 GHz

RF Fixed Attenuators Technical Data Sheet

LCAT1002-01

Features

- SMA connector interface
- DC to 3 GHz Frequency Range
- Attenuation 1±0.5 dB
- Max Power 2 Watt (CW)
- VSWR < 1.2:1

Applications

- Instrumentation
- RF test systems
- Prototyping and characterization
- Production systems
- 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 1 dB Fixed Attenuator LCAT1002-01 is rated to 2 Watts and operates from DC to 3 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 | | 3 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 1 | | dB |
| Attenuation Accuracy | | 0.5 | | dB |
| VSWR | | | 1.2:1 | |
| Input Power, Peak 5µs pulse with 0.2% duty cycle | | | 500 | Watts |
| Input Power, CW 0.5W @ 125°C | | | 2 | Watts |

Mechanical Specifications

Size

| | |
|---------------------------|--------------------|
| Length | 1.1811 in [30 mm] |
| Width/Diameter | 0.312 in [7.92 mm] |
| Weight | 0.022 lbs [9.98 g] |
| Body Material and Plating | Brass, Gold |

Configuration

| | |
|--------|-------|
| Design | Fixed |
|--------|-------|



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Connectors

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

Environmental Specifications

Temperature

Operating Range

-55 to +125 deg C

Compliance Certifications

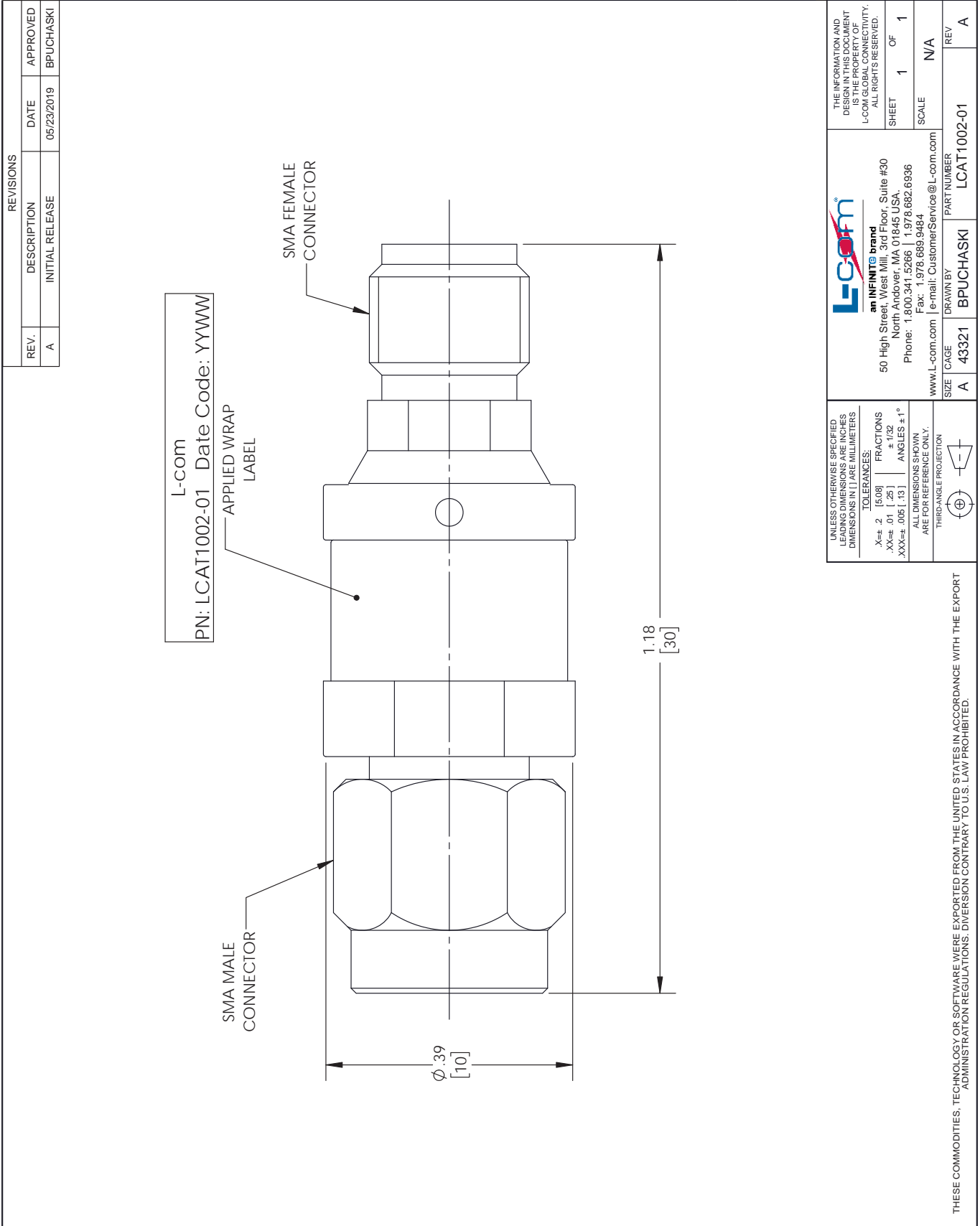
Plotted and Other Data

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.

LCAT1002-01 CAD Drawing

2W/1dB RF Fixed Attenuator, SMA Male to SMA Female Brass Gold Body Up to 3 GHz



| REVISIONS | | |
|-----------|-----------------|------------|
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| A | INITIAL RELEASE | 05/23/2019 |
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