

the state

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

LCAT1002-03

Features

- SMA connector interface
- DC to 3 GHz Frequency Range
- Attenuation 3±0.5 dB

Applications

- Instrumentation
- RF test systems
- · Prototyping and characterization

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 LCAT1002-03 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		3		dB
Attenuation Accuracy		0.5		dB
VSWR			1.2:1	
Input Power, CW			2	Watts
0.5W @ 125°C				
Input Power, Peak			500	Watts
5µs pulse with 0.2% duty cycle				

Mechanical Specifications

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

- Max Power 2 Watt (CW)
- VSWR < 1.2:1
- Production systems
- Precision measurements



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



LCAT1002-03

Connectors

Description	Connector 1	Connector 2
Туре	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 (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

2W/3 dB RF Fixed Attenuator, SMA Male to SMA Female Brass Gold Body Up to 3 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/coaxial-2w-3-db-rf-fixed-attenuator-sma-male-to-sma-female-brass-gold-body-up-to-3-ghz-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

© 2025 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.