

10W/10dB RF Fixed Attenuator, NEX10 Male to NEX10 Female Aluminum Body Up to 6 GHz



LCAT7491-10

Features

- DC to 6 GHz Range
- NEX10 Connectorized Design
- Attenuation 10 ±1 dB
- Max Power 10 Watts (CW)
- VSWR 1.25:1

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems
- 5G Cellular Bands
- DAS 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 10 dB Fixed Attenuator LCAT7491-10 is rated to 10 Watts and operates from DC to 6 GHz. The versatile coaxial package uses NEX10 male to NEX10 female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Nominal Attenuation		10		dB
Attenuation Accuracy		1		dB
VSWR			1.25:1	
Input Power, CW			10	Watts
Input Power, Peak			100	Watts
20µs pulse, 8% duty cycle				

Mechanical Specifications

Size

Length	2.244 in [57 mm]
Width/Diameter	0.787 in [19.99 mm]
Weight	0.1 lbs [45.36 g]
Body Material and Plating	Aluminum

Configuration

Design	Fixed, Bidirectional
Design Type	Standard
Package Style	Connectorized

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Connectors

Description	Connector 1	Connector 2
Type	NEX10 Male	NEX10 Female
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

Environmental Specifications

Temperature

Operating Range	-40 to +75 deg C
Storage Range	+85 to -50 deg C
Humidity	<95%
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6-Fc
Altitude	<5000m
Thermal Shock	IEC 60068-2-14-Na

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

Plotted and Other Data

Notes:

Typical Performance Data

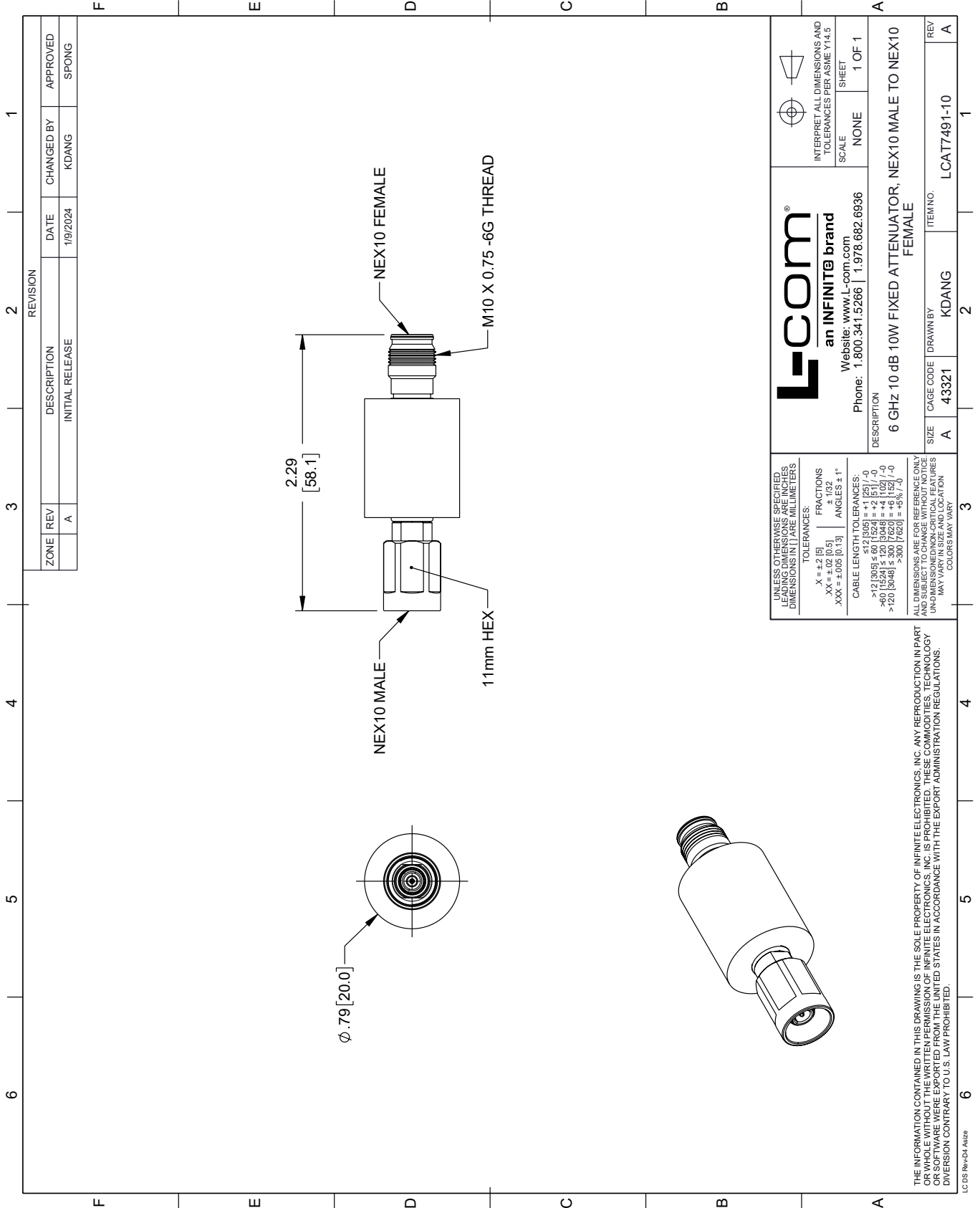
10W/10dB RF Fixed Attenuator, NEX10 Male to NEX10 Female Aluminum Body Up to 6 GHz from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/10w-10db-rf-fixed-attenuator-nex10-male-nex10-female-aluminum-body-up-6-ghz-lcat7491-10-p.aspx>

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LCA7491-10 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	SPONG
	A			

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: 6 GHz 10 dB FIXED ATTENUATOR, NEX10 MALE TO NEX10 FEMALE

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	43321	KDANG	LCA7491-10

REV: A

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

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0
 >120 [3048] ≤ 300 [7620] = ±.3 [7.6]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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LC 05 Rev-D4 Atsize