

# Fixed Coaxial Attenuators

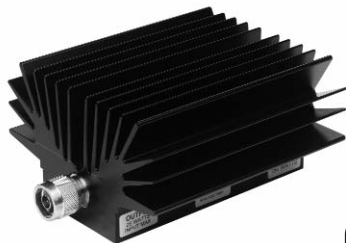


## Model 49 High Power Fixed Coaxial Attenuator

dc to 8.5 GHz  
150 Watts



Conduction/Convection Cooled



### Features

- Quality connectors with special high temperature support beads.
- Designed to meet environmental requirements of MIL-DTL-3933.
- Flexible Mounting Position - The units may be mounted in horizontal (fins up) or vertical position.

### Specifications

NOMINAL IMPEDANCE: 50  $\Omega$

FREQUENCY RANGE: dc to 8.5 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY (dB):

Nominal ATTN (dB)	dc-4 GHz		4 - 8.5 GHz	
	49	49-LIM	49	49-LIM
3, 6	$\pm 0.40$	---	$\pm 0.75$	---
10, 20	$\pm 0.40$	$\pm 0.70$	$\pm 0.75$	$\pm 1.25$
30	$\pm 0.40$	$\pm 0.70$	$\pm 0.75$	$\pm 1.75$
40	$\pm 0.50$	$\pm 0.70$	$\pm 1.00$	$\pm 1.75$

#### MAXIMUM SWR:

Frequency (GHz)	SWR
dc - 4	1.25
4 - 8.5	1.35

**3rd ORDER INTERMODULATION (49-XX-XX-LIM ONLY):**  
Reflected Levels (IM3), -95 & Through Levels (IM3), -110 dBc with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +43 dBm each.

**POWER RATING (mounted horizontally or vertically):** 150 watts average (unidirectional) to 35°C ambient temperature, derated linearly to 15 watts @ 125°C. 5 kilowatt peak (5  $\mu$ sec pulse width; 1.5% duty cycle). Maximum power rating into output port is 25 watts average.

**POWER COEFFICIENT:** <0.0001 dB/dB/watt

**TEMPERATURE COEFFICIENT:** <0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55°C to 125°C

**TEST DATA:** Insertion loss test data supplied at 0.05, 4.0, and 8.5 GHz. Other test data can be provided at additional cost.

**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

#### Connector Options

3  
4

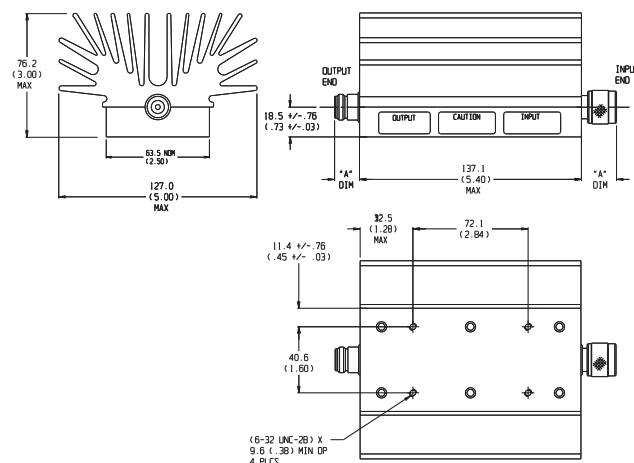
#### Type/Description

Type N, Female  
Type N, Male

**CONSTRUCTION:** Aluminum alloy body, stainless steel connectors; gold plated beryllium copper female contacts or stainless steel male contacts. (-LIM option uses different connector and contact materials)

**WEIGHT:** 1,450 g (3 lbs, 3 oz.) maximum

#### PHYSICAL DIMENSIONS:



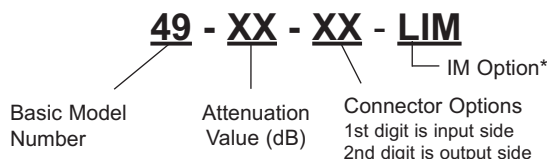
Connector	DIM A
N Male	22.9 (0.90)
N Female	15.0 (0.59)

#### NOTE:

- All dimensions are given in mm (inches) and are maximum, unless otherwise specified.
- Unit available with RoHS compliant materials, specify when ordering.

#### MODEL NUMBER DESCRIPTION:

Example:



\*Add -LIM for Low Intermodulation option. Option only available in 10, 20, 30, and 40 dB and is not available through Express.