

# Fixed Coaxial Attenuators



## Model 49 High Power, N Connectors Conduction/Convection Cooled

dc to 8.5 GHz  
150 Watts



### 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 Ω

FREQUENCY RANGE: dc to 8.5 GHz

MAXIMUM DEVIATION OVER FREQUENCY (dB):				
Nominal ATTN (dB)	49		49-LIM	
	dc - 4 GHz	4 - 8.5 GHz	dc - 4 GHz	4 - 8.5 GHz
3, 6	± 0.50	± 1.00	---	---
10, 20	± 0.40	± 0.75	± 0.70	± 1.25
30	± 0.40	± 0.75	± 0.70	± 1.75
40	± 0.50	± 1.00	± 0.70	± 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), -100 & 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 25°C ambient temperature, derated linearly to 15 watts @ 125°C. 5 kilowatt peak (5 μsec 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:** Swept data plots of attenuation and SWR from 50 MHz to 8.5 GHz.

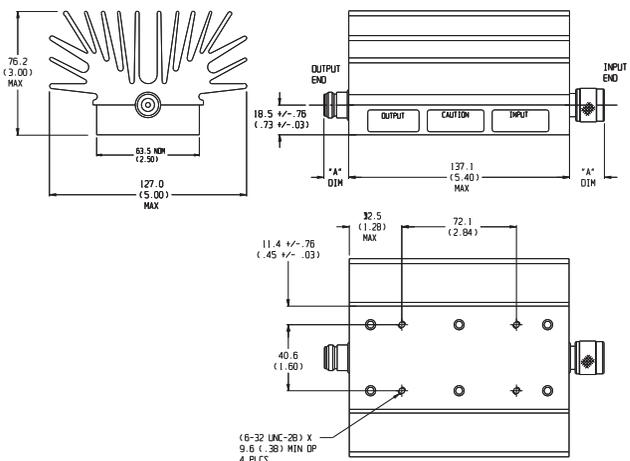
**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

Connector Options	Type/Description
3	Type N, Female
4	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:**

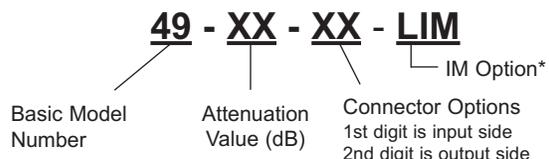


Connector	DIM A
N Male	22.9 (0.90)
N Female	15.0 (0.59)

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

### 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.