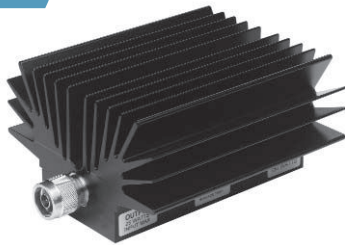


Model 49 High Power Fixed Coaxial Attenuator

dc to 8.5 GHz
150 Watts

Convection Cooled



Features

- Quality connectors with special high temperature support beads.
- Designed to meet environmental requirements of MIL-A-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) | dc-4 GHz | | 4 - 8.5 GHz | |
|----------------------|------------|------------|-------------|------------|
| | 49 | 49-LIM | 49 | 49-LIM |
| 3, 6 | ± 0.40 | --- | ± 0.75 | --- |
| 10, 20 | ± 0.40 | ± 0.70 | ± 0.75 | ± 1.25 |
| 30 | ± 0.40 | ± 0.70 | ± 0.75 | ± 1.75 |
| 40 | ± 0.50 | ± 0.70 | ± 1.00 | ± 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 μ 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

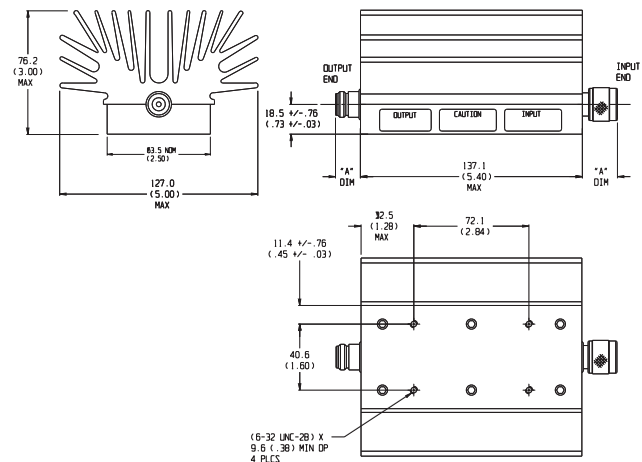
Type/Description

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.

MODEL NUMBER DESCRIPTION:

Example:

49 - XX - XX - LIM

Basic Model
Number

Attenuation
Value (dB)

Connector Options
1st digit is input side
2nd digit is output side

IM Option*

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