



dc to 8.5 GHz

Model 49 High Power Fixed Coaxial Attenuators

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 | dc-4 GHz | | 4 - 8.5 GHz | | | |
| ATTN (dB) | 49 | 49-LIM | 49 | 49-LIM | | |
| 3, 6 | <u>+</u> 0.40 | | <u>+</u> 0.75 | | | |
| 10, 20 | <u>+</u> 0.40 | <u>+</u> 0.70 | <u>+</u> 0.75 | <u>+</u> 1.25 | | |
| 30 | <u>+</u> 0.40 | <u>+</u> 0.70 | <u>+</u> 0.75 | <u>+</u> 1.75 | | |
| 40 | <u>+</u> 0.50 | <u>+</u> 0.70 | <u>+</u> 1.00 | <u>+</u> 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 μsec pulse width; 1.5% duty cycle). Maximum power rating into output port is 20 watts average.

POWER COEFFICIENT: <0.0001 dB/dB/watt
TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

TEMPERATURE RANGE: -55°C to 125°C

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

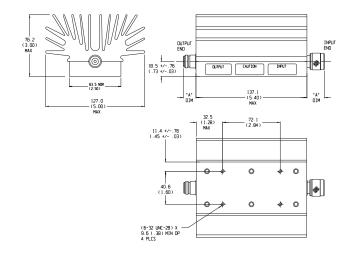
CONNECTORS: Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

| Connector Options | 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:

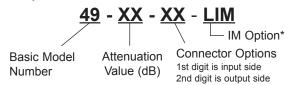


| Connector | DIM A | |
|-----------|-------------|--|
| N Male | 22.9 (0.90) | |
| N Female | 15.0 (0.59) | |

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.