

## Model 49, High Power, N Connectors

 **RoHS**

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  $\Omega$

**Frequency Range:** DC 8.5 to 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	$\pm 0.50$	$\pm 1.00$	---	---
10, 20	$\pm 0.40$	$\pm 0.75$	$\pm 0.70$	$\pm 1.25$
30	$\pm 0.40$	$\pm 0.75$	$\pm 0.70$	$\pm 1.75$
40	$\pm 0.50$	$\pm 1.00$	$\pm 0.70$	$\pm 1.75$

#### Maximum SWR:

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

#### 3<sup>rd</sup> 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  $\mu$ 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 Date:** Swept data plots of attenuation and SWR from 50 MHz to 8.5 GHz supplied.



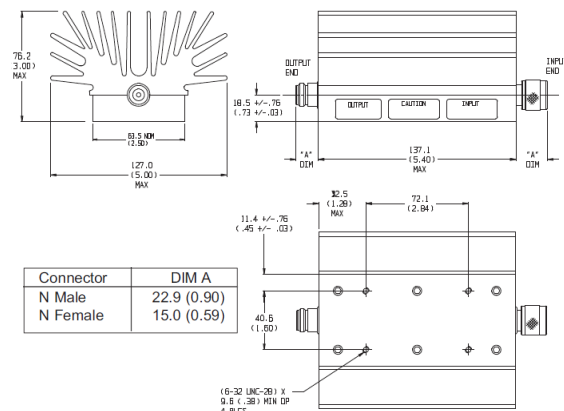
**Connectors:** Type N connectors per MIL-STD-348 interface dimensions - mate - nondestructively with MIL-C-39012 connectors.

Options	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:** 1,600 g (3 lbs, 8 oz) maximum

### Physical Dimensions



# Fixed Coaxial Attenuators

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150 Watts

### Model Number Description:

Example: **49 - XX - XX - LIM**

Basic Model Number	Attenuation Value (dB)	Connector Options: 1 <sup>st</sup> digit is J1 side 2 <sup>nd</sup> digit is J2 side	IM Option*
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\*Add -LIM for Low Intermodulation option. Option only available in 10, 20, 30, and 40 dB and is not available through Express.