

**Model 53**  
**High Power, N Connectors**  
**Conduction/Convection Cooled**

**Fixed Coaxial Attenuators**

**dc to 2.5 GHz**  
**500 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.
- /// Low Intermodulation Distortion Option.

**Specifications**

**NOMINAL IMPEDANCE:** 50 Ω

**FREQUENCY RANGE:** dc to 2.5 GHz

**MAXIMUM DEVIATION OVER FREQUENCY:**

Nominal ATTN (dB)	Deviation (dB)	
	53	53 LIM
3, 6	± 1.00	---
10, 20, 30, 40	± 1.00	± 1.20

**MAXIMUM SWR:**

Frequency (GHz)	53	53 LIM
dc - 2.5	1.10	1.15

**3rd ORDER INTERMODULATION (53-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 with fins vertical):** 500 watts average (unidirectional) to 25°C ambient temperature, derated linearly to 50 watts @ 125°C. 10 kilowatt peak (5 μsec pulse width; 2.5% duty cycle). Maximum power rating into output port is 50 watts average.

**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 2.5 GHz.

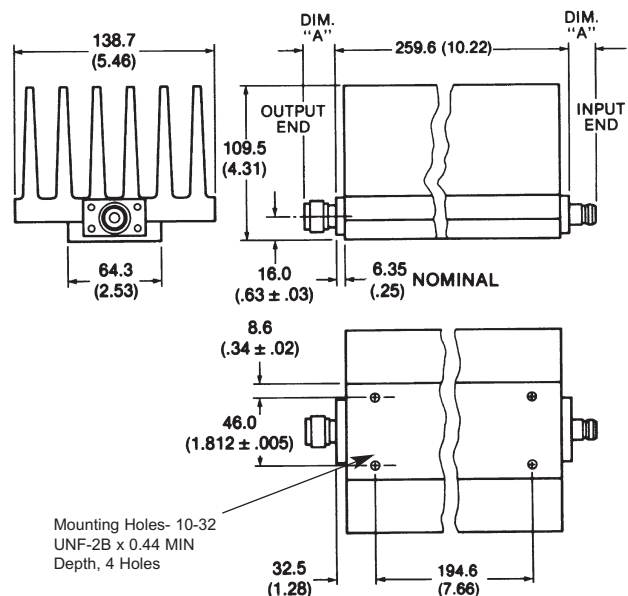
**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

Connector Options	Type/Description
3	Type N, Female
4	Type N, Male

**CONSTRUCTION:** Aluminum alloy body, gold plated beryllium copper contacts.

**WEIGHT:** 3,640 g (8 lbs.) maximum

**PHYSICAL DIMENSIONS:**



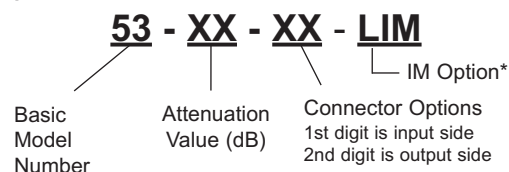
Mounting Holes- 10-32 UNF-2B x 0.44 MIN Depth, 4 Holes

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.