

Model 53 High Power, N Connectors Conduction/Convection Cooled

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 μ sec 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.

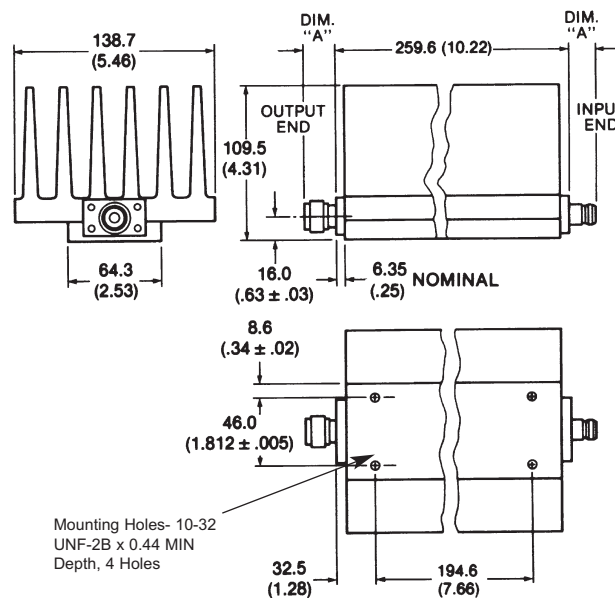
CONNECTORS: Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

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:



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:

53 - 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.