

## Model 40 Model 57 High Power Fixed Coaxial Attenuators

Type N Connectors

dc to 1.5 GHz  
dc to 5.0 GHz  
150 Watts



### Features

- Quality connectors with special high temperature support beads.
- Designed to meet environmental requirements of MIL-A-3933.

### Specifications

**NOMINAL IMPEDANCE:** 50  $\Omega$

**FREQUENCY RANGE:** Model 40: dc to 1.5 GHz  
Model 57: dc to 5.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

Nominal ATTN (dB)	Deviation (dB)		
	40	57	57-LIM
3*, 6	$\pm 0.50$	$\pm 1.25$	- - -
10, 20	$\pm 0.50$	$\pm 1.25$	$\pm 1.75$
30, 40	$\pm 0.50$	$\pm 1.50$	$\pm 2.00$

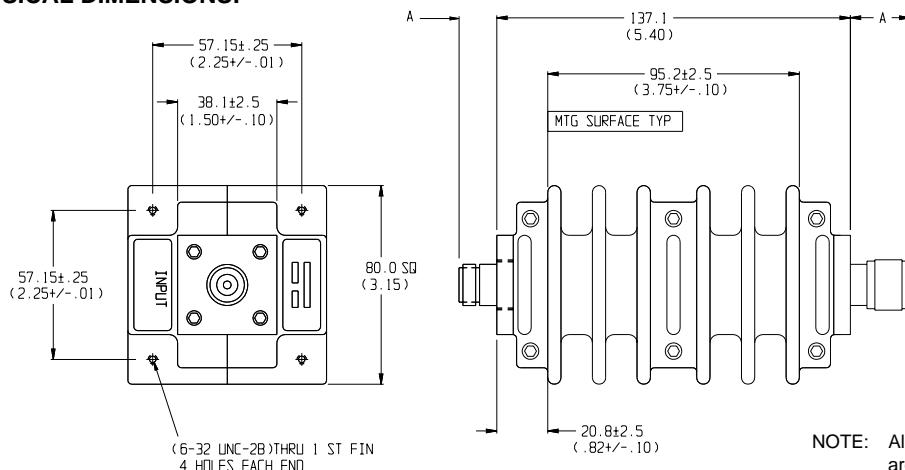
#### MAXIMUM SWR:

Frequency (GHz)	Input	Output
dc - 2 (1.5*)	1.10	1.20 (1.10*)
2 - 5	1.15	1.20

\* Model 40 only!

**3rd ORDER INTERMODULATION (57-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. Option only available 10, 20, 30, 40 dB.

### 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.

**POWER RATING** (mounted horizontally with fins vertical): 150 watts **average** (unidirectional) to 55°C ambient temperature, derated linearly to 10% @ 125°C. Note: 3 dB model can handle 300 Watts **average** (unidirectional). 10 kilowatt **peak** (5  $\mu$ sec pulse width; 0.75% 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, 1, 2, 3, 4, and 5 GHz (Model 40 at 0.05 and 1.5 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 female copper contacts and stainless steel male contacts.

**WEIGHT:** 1,130 g (2 lbs, 8 oz.) maximum

### MODEL NUMBER DESCRIPTION:

Example:

**57 - XX - XX - LIM**  
IM Option\*

Basic Model Number      Attenuation Value (dB)      Connector Options  
1st digit is input side  
2nd digit is output side

\* Add -LIM for Low Intermodulation option. Option only available 10, 20, 30, 40 dB.