

# Fixed Coaxial Attenuators

**Model 45**

**Model 58**

**High Power, N or SMK Connectors**

**Convection Cooled**

**dc to 1.5 GHz**

**dc to 6.0 GHz**

**250 Watts**

**RoHS**



## Features

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

## Specifications

**NOMINAL IMPEDANCE:** 50 Ω

**FREQUENCY RANGE:** Model 45: dc to 1.5 GHz  
 Model 58: dc to 6.0 GHz

### MAXIMUM DEVIATION OVER FREQUENCY:

Nominal ATTN (dB)	Deviation (dB)		
	45	58	58 LIM
3, 6	± 0.50	± 1.50	- - -
10, 20	± 0.50	± 1.50	± 2.00
30, 40	± 0.50	± 1.75	± 3.00

### MAXIMUM SWR:

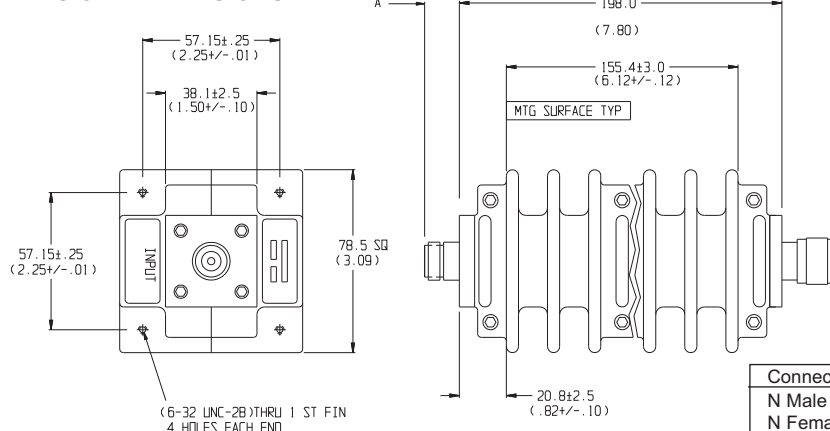
Frequency (GHz)	45/58		58 LIM	
	Input	Output	Input	Output
dc - 2 (1.5*)	1.10	1.20 (1.10*)	1.20	1.25
2 - 6	1.15	1.25	1.20	1.25

\* Model 45 only!

### 3rd ORDER INTERMODULATION (58-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.

### PHYSICAL DIMENSIONS:



NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

Connector	DIM A	Connector	DIM A
N Male	22.9 (0.90)	2.92mm Male	14.0 (0.55)
N Female	15.0 (0.59)	2.92mm Female	12.7 (0.50)

**POWER RATING** (mounted horizontally with fins vertical): 250 watts **average** (unidirectional) to 55°C ambient temperature, derated linearly to 25 watts @ 125°C. 10 kilowatt **peak** (5 μsec pulse width; 1.25% duty cycle). Maximum power rating into output port is 50 watts average.

**POWER COEFFICIENT:** <0.0001 dB/dB/watt

**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 1.5 / 6 GHz.

**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. SMK (2.92mm) connectors - mate nondestructively with SMA per MIL-C-39012, 3.5mm, SMK, and other 2.92mm connectors.

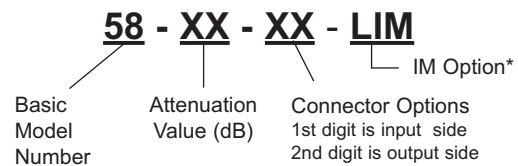
Options	Description	Options	Description
1	SMK Female	3	Type N Female
2	SMK Male	4	Type N Male

**CONSTRUCTION:** Aluminum alloy body, stainless steel connectors; gold plated beryllium copper contacts.

**WEIGHT:** 1,530 g (6 lbs, 3 oz.) maximum

### MODEL NUMBER DESCRIPTION:

Example:



\* Add -LIM for Low Intermodulation option. Option only available with Model 58 in 10, 20, 30, 40 dB and is not available through Express.