

## Fixed Coaxial Attenuators Model 40 and Model 57

High Power, N or SMK Connectors

 **RoHS**

**DC to 1.5 GHz**  
**DC to 6.0 GHz 150**  
**Watts**

### Features

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

### Specifications

**Nominal Impedance:** 50  $\Omega$

**Frequency Range:** Model 40: DC to 1.5 GHz

Model 57: DC 6.0 GHz

#### Maximum Deviation Over Frequency:

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

#### Maximum SWR:

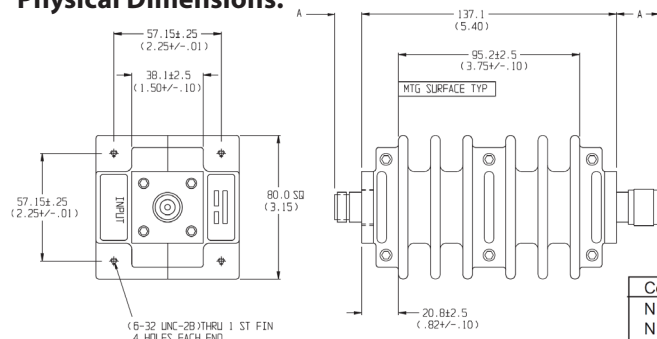
Frequency (GHz)	Input	Output
dc - 2 (1.5*)	1.10	1.10
2 - 6	1.15	1.20

\* Model 40 only!

#### 3<sup>rd</sup> 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 6, 10, 20, 30, 40 dB.

#### Physical Dimensions:



**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 25°C ambient temperature, derated linearly to 15 watts @ 125°C. 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

**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

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)

## Fixed Coaxial Attenuators Model 40 and Model 57

*High Power, N or SMK Connectors*

**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**

Basic Model	Attenuation	Connector Options:	IM Option*
Number	Value (dB)	1 <sup>st</sup> digit is J1 side 2 <sup>nd</sup> digit is J2 side	

\*Add -LIM to entire model number for Low Intermodulation option. Option only available in 10, 20, 30, 40 dB and is not available through Express.

**dc to 12.4 GHz**  
**dc to 18.0 GHz**  
**150 Watts**