

# Fixed Coaxial Attenuators

## Model 3M Model 4M Ruggedized SMA Connectors

dc to 12.4 GHz  
dc to 18.0 GHz  
2 Watts

**RoHS**



### Features

- /// Rugged injection molded connectors.
- /// Designed to meet environmental requirements of MIL-DTL-3933.
- /// Usable to 22 GHz.

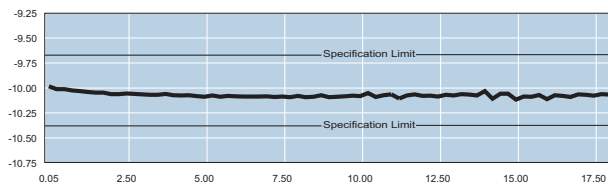
### Specifications

**NOMINAL IMPEDANCE:** 50 Ω

**FREQUENCY RANGE:** Model 3M: dc to 12.4 GHz  
Model 4M: dc to 18.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

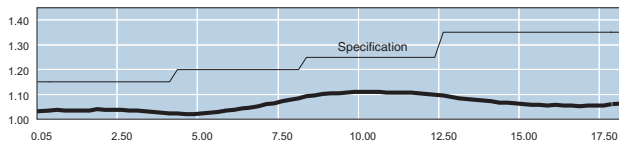
Nominal ATTN (dB)	3M	4M
1 - 2	± 0.30	± 0.50
3 - 6	± 0.30	± 0.30
7 - 10	± 0.30	± 0.50
20	± 0.50	± 0.70
30, 40	± 0.75	± 1.00
50, 60	± 1.00	± 2.00



Typical Attenuation Performance of 4M-10

#### MAXIMUM SWR:

Frequency (GHz)	3M	4M
dc - 4	1.15	1.15
4 - 8	1.20	1.20
8 - 12.4	1.25	1.25
12.4 - 18	---	1.35



Typical SWR of a Model 4M-10

**POWER RATING:** 2 watts **average** to 25°C ambient temperature, derated linearly to 0.5 watts at 125°C. 500 watts **peak** (5 μsec pulse width; 0.2% duty cycle).

**POWER COEFFICIENT:** < 0.005 dB/dB/watts

**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 12.4 / 18 GHz is available at additional cost.

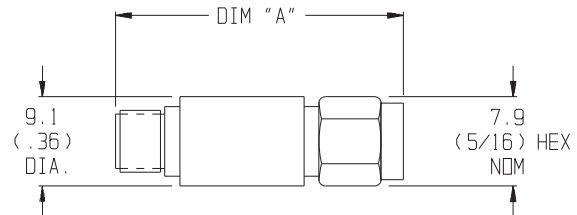
**CONNECTORS:** SMA connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

**CONSTRUCTION:** Passivated stainless steel body and connectors; gold plated beryllium copper contacts.

#### WEIGHT (Both Models):

dB VALUE	WEIGHT (Net)
1 - 10, 20	10 g (0.35 oz)
30, 40, 50, 60	20 g (0.70 oz)

#### PHYSICAL DIMENSIONS:



dB VALUE	DIM A ± 0.5 (0.02)		
	STD	Prefix F	Prefix M
1 - 10, 20	30.5 (1.20)	29.7 (1.17)	32.3 (1.27)
30, 40, 50, 60	47.0 (1.85)	46.2 (1.82)	47.7 (1.88)

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

#### MODEL NUMBER DESCRIPTION:

Example:

**\*4M - XX**

Basic Model Number

Attenuation Value (dB)

\*Add Prefix M for double male and F for double female connectors.