

# Fixed Coaxial Attenuators



## Model 44 Lab Standard Fixed Coaxial Attenuator

dc to 18.0 GHz  
5 Watts

### Lab Standard N Connectors



### Features

- /// Precision Connectors
- /// Test data - A certificate of test supplied with each attenuator.
- /// Hex Nut Connector - Allows for use of a torque wrench to improve connector repeatability.
- /// Designed to meet environmental requirements of MIL-DTL-3933.

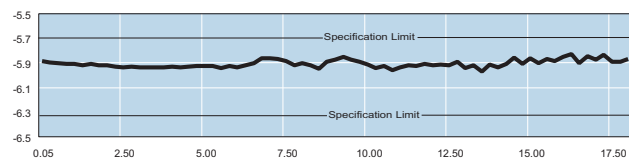
### Specifications

**NOMINAL IMPEDANCE:** 50 Ω

**FREQUENCY RANGE:** dc to 18.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

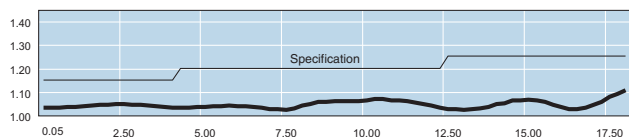
| Nominal ATTN (dB) | Deviation (dB) |
|-------------------|----------------|
| 1 - 9             | ± 0.30         |
| 10, 20            | ± 0.50         |
| 30, 40            | ± 1.00         |
| 50                | ± 1.25         |
| 60                | ± 1.50         |



Typical Attenuation Accuracy of a 44-6

#### MAXIMUM SWR:

| Frequency (GHz) | SWR  |
|-----------------|------|
| dc - 4          | 1.15 |
| 4 - 12.4        | 1.20 |
| 12.4 - 18       | 1.25 |



Typical SWR of a 44-6

**POWER RATING:** 5 watts **average** to 25°C ambient temperature, derated linearly to 4 watts @ 45°C, 3 watts @ 65°C, and 2 watts @ 85 °C. 1 kilowatt **peak** (5 μsec pulse width; 0.25% duty cycle).

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

**TEMPERATURE COEFFICIENT:** < 0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -50°C to +85°C

**TEST DATA:** Insertion loss and SWR data supplied at 0.05, 4, 8, 12 and 18 GHz. Other test data available at additional cost.

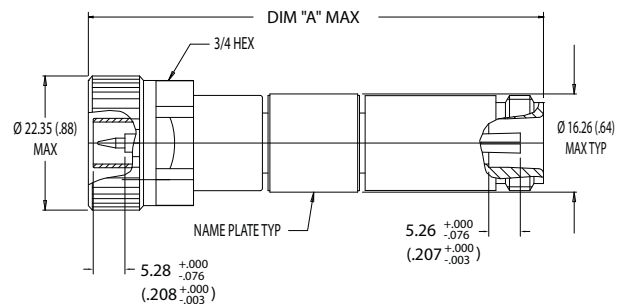
**CONNECTORS:** Precision Type N per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. Coupling Torque: 14 ± 1 in/lbs.

**CONSTRUCTION:** Brass Body (plated) and Stainless steel connectors; gold plated beryllium copper contacts.

**WEIGHT:**

| dB VALUE       | WEIGHT (Net)   |
|----------------|----------------|
| 1 - 10, 20, 30 | 100 g (3.5 oz) |
| 40, 50, 60     | 140 g (4.5 oz) |

#### PHYSICAL DIMENSIONS:



| dB VALUE     | Prefix M   | DIM A STD  | Prefix F    |
|--------------|------------|------------|-------------|
| 0-10, 20, 30 | 76.2 (3.0) | 76.2 (3.0) | 77.7 (3.06) |
| 40, 50, 60   | 86.4 (3.4) | 86.4 (3.4) | 87.9 (3.46) |

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

#### MODEL NUMBER DESCRIPTION:

Example:

**\*44 - XX**

Basic Model Number      Attenuation Value (dB)

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

**ATTENUATOR SET (AS-18):** Model 44 is also available in a Attenuator Set which includes six different attenuators (1, 3, 6, 10, 20, 30 dB). Refer to Attenuator Sets data sheet for more information.