

# Fixed Coaxial Attenuators

## Model 81 High Power, N Connectors Conduction/Convection Cooled

dc to 10.0 GHz  
500 Watts



### 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:** dc to 10.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY (dB):

NOM ATTN (dB)	Deviation	
	dc - 7.0 GHz	7.0 - 10.0 GHz
10, 20, 30, 40	±3.0	+5 / -0 dB

#### MAXIMUM SWR:

Frequency (GHz)	SWR
dc - 9.0	1.50
9.0 - 10.0	1.90

**POWER RATING:** 500 watts **average (unidirectional)** to 25°C ambient temperature, derated linearly to 50 watts @ 125°C. 5 kilowatt **peak** (5 μsec pulse width; 5% duty cycle). Maximum power into output is 20 Watts **average**.

**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 10 GHz.

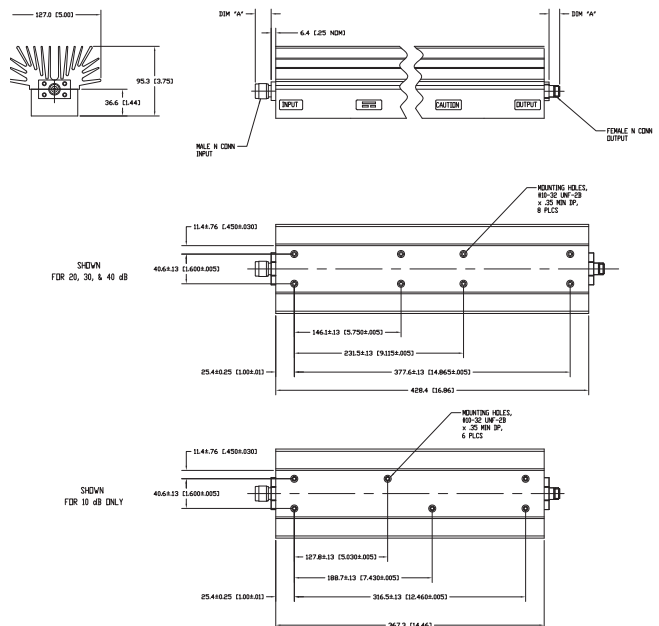
**CONNECTOR:** Type N connectors - mate nondestructively with MIL-C-39012 connectors.

Options	Type/Description
3	Type N, Female
4	Type N, Male

**CONSTRUCTION:** Black, finned aluminum body, stainless steel or connectors with gold plated beryllium copper contacts.

**WEIGHT:** 10 dB: 5.3 kg (11 lbs, 11 oz) maximum  
20, 30, 40 dB: 6.24 Kg (13 lbs, 12 oz) maximum

### PHYSICAL DIMENSIONS:



Connector Type	DIM A
N female	15.0 (0.59)
N male	22.9 (0.90)

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

### MODEL NUMBER DESCRIPTION:

