

Fixed Coaxial Attenuators

Model 47

Medium Power, N or 3.5mm Connectors

DC to 18.0 GHz

50 Watts



Features

- Designed to meet environmental requirements of MIL-DTL-3933.
- Rugged injection molded connectors.

Specifications

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: DC to 18.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:

Nominal ATTN (dB)	Deviation (dB)
3, 6	± 0.75
10, 20	± 0.75
30, 40	± 1.00

MAXIMUM SWR:

Frequency (GHz)	3, 6 dB	10, 20, 30, 40 dB
dc - 8	1.25	1.20
8 - 12.4	1.35	1.25
12.4 - 18	1.45	1.35

POWER RATING (mounted horizontally): 50 watts **average (unidirectional)** to 25°C ambient temperature, derated linearly to 5 watts @ 125°C. Note: 3 dB model can handle 100 Watts **average (unidirectional)**. 1 kilowatt **peak** (5 μ sec pulse width; 2.5% duty cycle). Maximum power rating into output port is 10 Watts average.

POWER COEFFICIENT: <0.0003 dB/dB/watt

TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

TEMPERATURE RANGE: -55°C to 125°C

3rd Order Intermodulation

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.

TEST DATA: Swept data plots of attenuation and SWR from 50 MHz to 18 GHz.

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

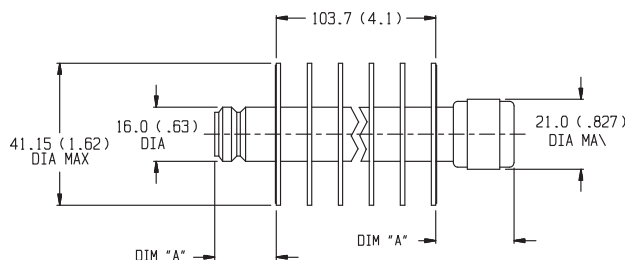
3.5mm Connectors - mate nondestructively with SMA per MIL-C-39012, 2.92mm and other 3.5mm connectors.

Options	Description	Options	Description
1	3.5mm Female	3	Type N Female
2	3.5mm Male	4	Type N Male

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

WEIGHT: 175 g (6 oz.) maximum

PHYSICAL DIMENSIONS:



Connector	DIM A	Connector	DIM A
N Male	24.1 (0.95)	3.5mm Female	14.0 (0.55)
N Female	19.0 (0.75)	3.5mm Male	13.2 (0.52)

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

Model Number Description

Example: 47 - XX - XX - LIM

Basic Model Attenuation Connector Options: IM Option*
 Number Value (dB) 1st digit is J1 side
 2nd 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.