



Model 48
Medium Power Fixed Coaxial Attenuators

dc to 18.0 GHz
100 Watts

Type N or 3.5mm Connectors



Features

- /// Designed to meet environmental requirements of MIL-A-3933.
- /// Low Intermodulation option available.
- /// Rugged injection molded connectors.

Specifications

NOMINAL IMPEDANCE: 50 Ω
FREQUENCY RANGE: dc to 18.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY (dB):

Nominal ATTN (dB)	48	48 LIM	
		dc-8 GHz	8-18 GHz
10	± 1.25	± 1.00	+3.0/-0.0
20	± 0.75	± 1.00	+3.0/-0.0
30, 40	± 1.00	± 1.00	+3.0/-0.0

MAXIMUM SWR:

Frequency (GHz)	48		48 LIM
	10 dB	20, 30, 40 dB	
dc - 8	1.40	1.25	1.40
8 -12.4	1.40	1.35	1.45
12.4 - 18	1.55	1.45	1.45

POWER RATING (mounted horizontally): 100 watts average (unidirectional) to 25°C ambient temperature, derated linearly to 10 watts @ 125°C. 1 kilowatt peak (5 μsec pulse width; 5% duty cycle). Maximum power rating into output port is 10% of the average power rating.

3rd ORDER INTERMODULATION: Reflected Levels (IM3), -100 dBc & Through Levels (IM3), -110 dBc with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +43 dBm each.

POWER COEFFICIENT: <0.00015 dB/dB/watt
TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C
TEMPERATURE RANGE: -55°C to 125°C

CALIBRATION: Insertion loss test data supplied at 0.05, 4.0, 8.0, 12.4, and 18.0 GHz. Other test data can be provided at additional cost.

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

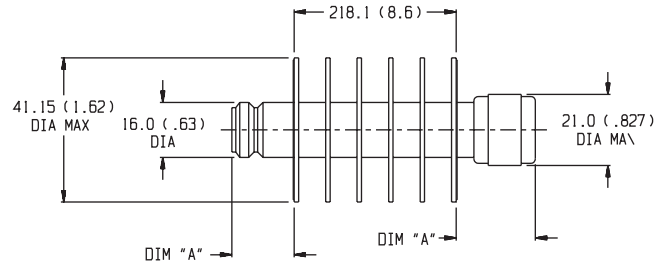
3.5mm (Male/Female) connectors - mate nondestructively with SMA per MIL-C-39012, 2.92mm and other 3.5mm connectors.

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

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

WEIGHT: 320 g (11 oz.) maximum

PHYSICAL DIMENSIONS:

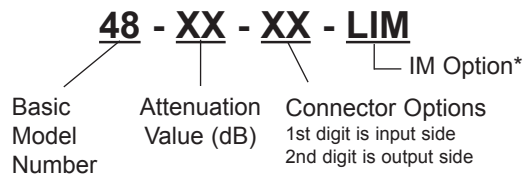


Connector	DIM A
3.5mm Female	13.2 (0.52)
3.5mm Male	14.0 (0.55)
N Male	24.1 (0.95)
N Female	19.0 (0.75)

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

MODEL NUMBER DESCRIPTION:

Example:



* Add -LIM to entire model number for Low Intermodulation option. Option is not available through Express.