

Model 46 Medium Power Fixed Coaxial Attenuators

**dc to 18.0 GHz
25 Watts**

Bi-directional Design



Features

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

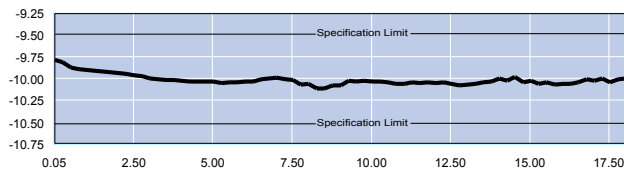
Specifications

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: dc to 18.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:

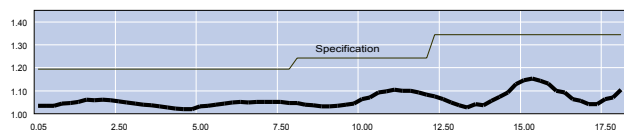
Nominal ATTN (dB)	46		46 LIM	
	dc-8 GHz	8-18 GHz	dc-8 GHz	8-18 GHz
3, 6	± 0.50	---	---	---
10	± 0.50	± 0.50	+1.0/-0.0	---
20	± 0.75	± 0.50	+1.0/-0.0	---
30, 40	± 1.00	± 0.50	+1.0/-0.0	---



Typical Attenuation Accuracy of a 46-10-34

MAXIMUM SWR:

Frequency (GHz)	SWR
dc - 8	1.20
8 -12.4	1.25
12.4 - 18	1.35



Typical SWR of a 46-10-34

3rd ORDER INTERMODULATION (46-XX-XX-LIM ONLY): Reflected Levels (IM3), -100 dBc and Through Levels (IM3), -110 dBc with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +41 dBm each. Option only available 10, 20, 30, 40 dB.

POWER RATING (mounted horizontally): 25 watts average (bi-directional) to 25°C ambient temperature, derated linearly to 2.5 watts @ 125°C. Note: 3 dB model can handle 50 Watts average (bi-directional). 1 kilowatt peak (5 μsec pulse width; 1.25% duty cycle).

POWER COEFFICIENT: <0.0006 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, 12.0, 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.

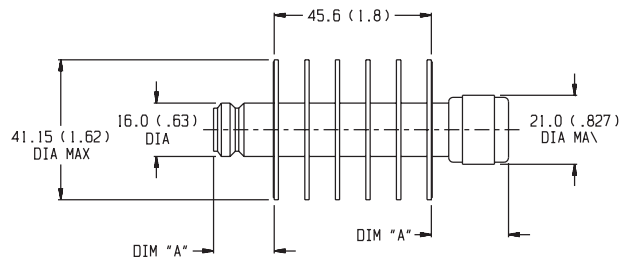
3.5mm Connectors - mate nondestructively with SMA per MIL-C-39012, 2.92mm and other 3.5mm connectors.

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: 110 g (4 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:

46 - XX - XX* - LIM

Basic Model Number Attenuation Value (dB) Connector Options
 1st digit is J1 side
 2nd digit is J2 side

* Unit is bi-directional & full power may be applied to either J1 or J2.
 ** Add -LIM for Low Intermodulation option. Option only available in 10, 20, 30 and 40 dB and is not available through Express.