

Fixed Coaxial Attenuators



Model 90 Medium Power Fixed Coaxial Attenuator

dc to 18.0 GHz
50 Watts

3.5mm & N Connectors



Features

- /// Precision injection molded connector dielectric.
- /// Designed to meet environmental requirements of MIL-DTL-3933.
- /// Low Intermodulation option available.
- /// Flat Response.

Specifications

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: dc to 18.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:		
Nominal ATTN (dB)	90	90 LIM
3, 6	± 1.00	- - -
10, 20, 30	± 1.00	+2.0/-1.0

MAXIMUM SWR:	
Frequency (GHz)	SWR
dc - 8	1.15
8 - 12.4	1.20
12.4 - 18	1.30

POWER RATING (mounted horizontally): 50 watts average (bi-directional) to 25°C ambient temperature, derated linearly to 10 Watts @ 125°C. 1 kW peak (5 μsec pulse width; 2.5% duty cycle).

POWER COEFFICIENT: <0.0006 dB/dB/watt

TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

TEMPERATURE RANGE: -55 °C to 125 °C

3rd ORDER INTERMODULATION (90-XX-XX-LIM ONLY): Reflected Levels (IM3), -90 dBc and Through Levels (IM3), -100 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 dB.

TEST DATA SUPPLIED: Sweep SWR/Attenuation data/plots performed across 50 MHz to 18 GHz frequency range. Frequency Markers 0.05, 2.0, 4.0 8.0, 12.4, 18 GHz.

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

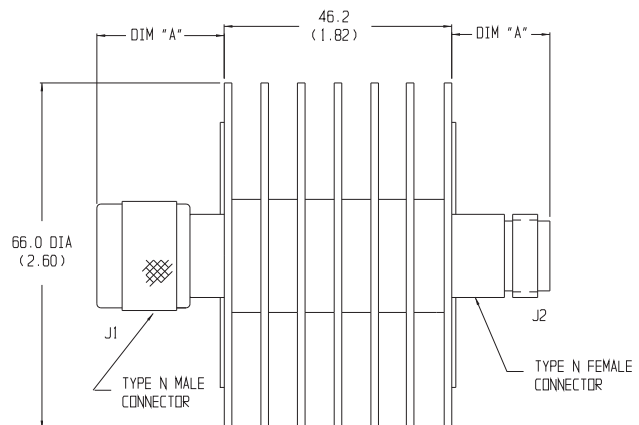
3.5mm Connectors - mate nondestructively with SMA per MIL-C-39012, 2.92mm and 3.5mm connectors.

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, gold plated beryllium copper contacts.

WEIGHT: 120 g (4.2 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:

1. All dimensions are given in mm (inches) and are maximum, unless otherwise specified.
2. Unit available with RoHS compliant materials, specify when ordering.

MODEL NUMBER DESCRIPTION:

Example:

90 - 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 and 30 dB.