

Models 85 & 86 Medium Power Fixed Coaxial Attenuators

dc to 18.0/22.0 GHz
50 Watts

Conduction Cooled, 3.5mm or TNC Connectors



Model 86 Shown!

Features

- /// Compact Construction - Lowest size/power ratio.
- /// Precision Connectors with high temperature support beads.
- /// Designed to meet environmental requirements of MIL-A-3933.
- /// Ideal for Airborne or Space Applications.

Specifications

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: Model 85: dc to 18.0 GHz
Model 86: dc to 22.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:

Nominal ATTN (dB)	Deviation (dB)	
	85	86
3, 6, 10, 20, 30	± 0.70	± 0.80

MAXIMUM SWR:

Frequency (GHz)	Model	SWR
dc - 18.0	85	1.30
dc - 22.0	86	1.30

POWER RATING 50 watts **average (unidirectional)**, 1 kilowatts **peak** (5 μ sec pulse width; 0.5 % duty cycle) with case temperature held within **90 °C maximum** with appropriate conductive heat sink. Maximum power rating into output port is 10% of the average power rating.

POWER COEFFICIENT: <0.0006 dB/dB/watt

TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

TEMPERATURE RANGE: -55°C to 90°C (case)

CONNECTORS: **Model 85:** TNC connectors mate nondestructively with MIL-C-39012 connectors.

Model 86: 3.5mm connectors - mate nondestructively with SMA per MIL-C-39012, 2.92mm and other 3.5mm connectors.

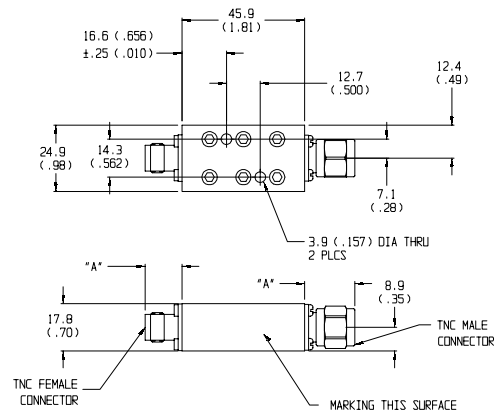
86 Options	Description	85 Options	Description
1	3.5mm Female	6	TNC Female
2	3.5mm Male	7	TNC Male

CONSTRUCTION: Aluminum body, stainless steel connectors; gold plated beryllium copper contacts.

WEIGHT: Model 85: 68 g (2.4 oz.) maximum
Model 86: 60 g (2.1 oz.) maximum

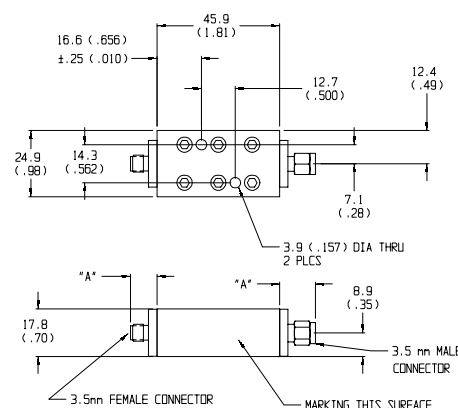
PHYSICAL DIMENSIONS:

Model 85 (TNC):



Connector	DIM A
TNC Male	18.4 $\pm$ 0.25 (0.744 $\pm$ 0.01)
TNC Female	13.8 $\pm$ 0.25 (0.546 $\pm$ 0.01)

Model 86 (3.5mm):



Connector	DIM A
3.5mm Male	13.4 $\pm$ 0.5 (0.53 $\pm$ 0.02)
3.5mm Female	9.9 $\pm$ 0.5 (0.32 $\pm$ 0.02)

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

MODEL NUMBER DESCRIPTION:

Example:

86 - XX - XX

Basic
Model
Number

Attenuation
Value (dB)

Connector Options
1st digit is input side
2nd digit is output side