

# Fixed Coaxial Attenuators



## Model 72 Medium Power Fixed Coaxial Attenuator

dc to 4.0 GHz  
50 Watts

Conduction Cooled, Bi-Directional Design!



### Features

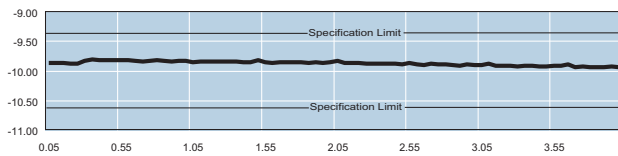
- /// **Compact Construction** - Lowest size/power ratio.
- /// **Precision Connectors with high temperature support beads.**
- /// **Designed to meet environmental requirements of MIL-DTL-3933.**
- /// **Wireless Applications** - Optimized for use in the communications bands.

### Specifications

**NOMINAL IMPEDANCE:** 50 Ω  
**FREQUENCY RANGE:** dc to 4.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

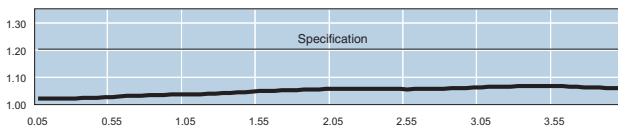
Nominal ATTN (dB)	Deviation (dB)
3, 6, 10, 20, 30, 40	± 0.70



Typical Attenuation Accuracy of a 72-10-34

#### MAXIMUM SWR:

Frequency (GHz)	SWR
dc - 4	1.20



Typical SWR of a 72-10-34

**POWER RATING** 50 watts **average (bi-directional)**, 1 kilowatts **peak** (5 μsec pulse width; 0.25 % duty cycle) with case temperature held within **100°C maximum** with appropriate conductive heat sink.

**POWER COEFFICIENT:** <0.0005 dB/dB/watt

**TEMPERATURE COEFFICIENT:** <0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55°C to 100°C (case)

**TEST DATA:** Insertion Loss and SWR Testing performed across frequency range. Test data available at additional cost.

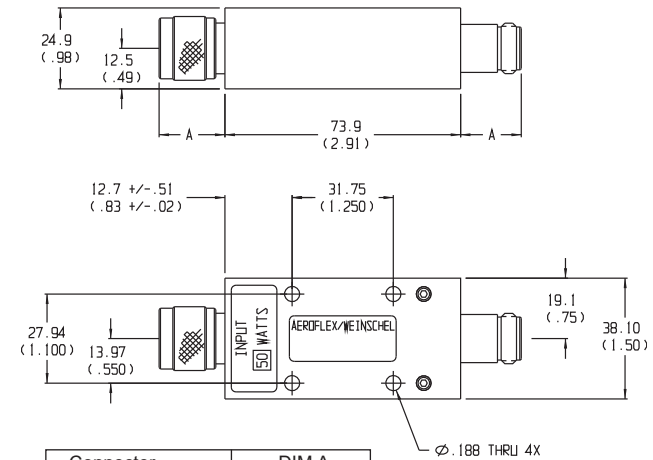
**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. 2.92mm connectors mate with SMA, 3.5mm, Type K and other 2.92mm connectors.

Connector Options	Type/Description
1	2.92mm, Female
2	2.92mm, Male
3	Type N, Female
4	Type N, Male

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

**WEIGHT:** 170 g (6 oz.) maximum

#### PHYSICAL DIMENSIONS:



Connector	DIM A
N Male	22.9 (0.90)
N Female	15.0 (0.59)
2.92mm, Male	14.0 (0.55)
2.92mm, Female	12.7 (0.50)

#### 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:

**72 - XX - XX\***

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.