

# Model 72

## Medium Power Fixed Coaxial Attenuators

dc to 4.0 GHz  
50 Watts

### Conduction Cooled



### Features

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

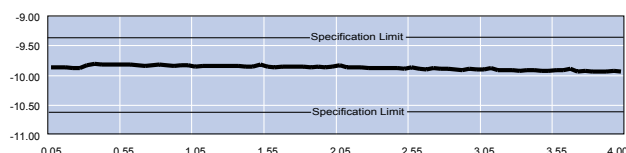
### Specifications

**NOMINAL IMPEDANCE:** 50  $\Omega$

**FREQUENCY RANGE:** dc to 4.0 GHz

#### MAXIMUM DEVIATION OVER FREQUENCY:

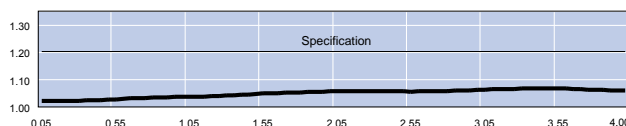
Nominal ATTN (dB)	Deviation (dB)
3, 6, 10, 20, 30	$\pm 0.70$



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** (unidirectional), 5 kilowatts **peak** (5  $\mu$ sec pulse width; 0.5 % duty cycle) with case temperature held within **100 °C maximum** with appropriate conductive heat sink. Maximum power rating into output port is 10% of the average power rating.

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

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

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

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

#### Connector Options

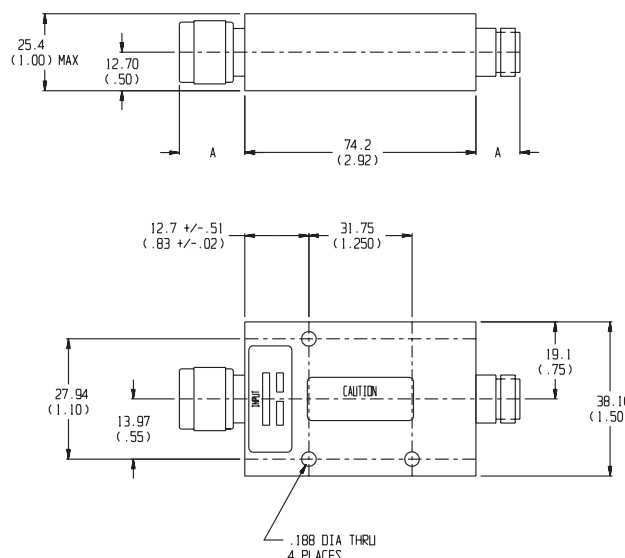
#### Type/Description

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:



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

#### MODEL NUMBER DESCRIPTION:

Example:

**72 - XX - XX**

Basic  
Model  
Number

Attenuation  
Value (dB)

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