

# Model 24 Medium Power Fixed Coaxial Attenuators

## dc to 8.5 GHz

## **Bi-Directional Design!**





#### **Features**

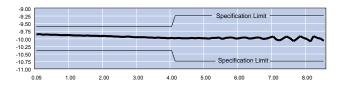
- Designed to meet environmental requirements of MIL-A-3933.
- // Low Intermodulation option available.
- // Mode free operation to 10 GHz.

## **Specifications**

NOMINAL IMPEDANCE: 50  $\Omega$ 

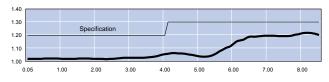
FREQUENCY RANGE: dc to 8.5 GHz

MAXIMUM DEVIATION OVER FREQUENCY (dB):							
Nominal	dc-4 GHz		4 - 8.5 GHz				
ATTN (dB)	24	24-LIM	24	24-LIM			
3, 6	<u>+</u> 0.40		<u>+</u> 0.75				
10, 20	<u>+</u> 0.40	<u>+</u> 0.50	<u>+</u> 0.75	<u>+</u> 1.00			
30, 40	<u>+</u> 0.60	<u>+</u> 0.70	<u>+</u> 1.00	<u>+</u> 1.25			



Typical Attenuation Accuracy of a 24-10-34

MAXIMUM SWR:	
Frequency (GHz)	SWR
dc - 4	1.20
4 - 8.5	1.30



Typical SWR of a 24-10-34

**3rd ORDER INTERMODULATION (24-XX-XX-LIM only!):** Reflected Levels (IM3), -100 & Through Levels (IM3), -110 dBc with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +43 dBm each. Option only available 10, 20, 30, 40 dB. IM specification at J2 limited to 20 Watts of input power.

**POWER RATING (mounted horizontally):** 50 watts **average (bi-directional)** to 25°C ambient temperature, derated linearly to 2.5 watts @ 125°C. Note: 3 dB model can handle 100 Watts **average (bi-directional)**. 5 kilowatt **peak** (5 μsec pulse width; 0.5% duty cycle).

POWER COEFFICIENT: <0.001 dB/dB/watt

TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55°C to 125°C (+85°C with GPC-7 connectors)

**CALIBRATION:** Insertion loss test data supplied at 0.05, 4.0, and 8.5 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. 2.92mm connectors - mate nondestructively with SMA per MIL-C-39012, 3.5mm, K®, and other 2.92mm.

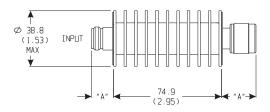
K® is a registered Trademark of Anritsu Wiltron 2.92mm connector.

<u>Options</u>	<u>Description</u>	<b>Options</b>	<u>Description</u>
1	2.92mm, Female	3	Type N, Female
2	2 92mm Male	4	Type N Male

**CONSTRUCTION:** Black, finned aluminum body, gold plated beryllium copper contacts.

WEIGHT: 280 g (10 oz.) maximum

PHYSICAL DIMENSIONS:

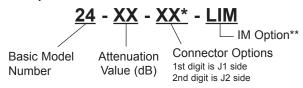


Connector	DIM A	Connector	DIM A
N Male	22.9 (0.90)	2.92mm Female	14.0 (0.55)
N Female	15.0 (0.59)	2.92mm Male	12.7 (0.50)

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

## **MODEL NUMBER DESCRIPTION:**

#### **Example:**



\*Unit is bi-directional & full power may be applied to either J1 or J2.

\*\*Add -LIM to entire model number for Low Intermodulation option. Option only available in 10, 20, 30, 40 dB and is not available through Express.

10/23/01