

# **Fixed Coaxial Attenuators** Model 24, Medium Power, N & SMK Connectors



# Bi-Directional Design

#### **Features**

- Designed to meet environmental requirements of MIL-DTL-3933
- Low Intermodulation option available
- · Mode free operation to 10 GHz

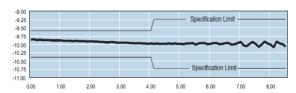
# **Specifications**

Nominal Impedance: 50  $\Omega$ 

Frequency Range: Model: dc 8.5 to GHz

# **Maximum Deviation Over Frequency (db):**

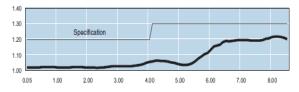
Nominal	24		24-LIM	
ATTN (dB)	dc-4 GHz	4 - 8.5 GHz	dc-4 GHz	4 - 8.5 GHz
3, 6, 10, 20	<u>+</u> 0.40	<u>+</u> 0.75	<u>+</u> 0.40	<u>+</u> 0.75
30, 40	<u>+</u> 0.60	<u>+</u> 1.00	<u>+</u> 0.60	<u>+</u> 1.00



Typical Attenuation Performance 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

#### 3<sup>rd</sup> 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.



Power Rating (mounted horizontally): ): 50 watts average (bi-directional) to 25°C ambient temperature, derated linearly to 2.5 watts @ 125°C. 5 kilowatt peak

(5 µsec pulse width; 0.5% duty cycle).

Power Coe icient: <0.0003 dB/dB/watt

**Temperature Coe** icient: < 0.0004 dB/dB/°C

**Temperature Range:** -55 °C to 125 °C

**Test Data:** Swept data plots of attenuation and SWR from 50 MHz to 8.5 GHz supplied.

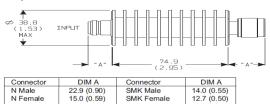
**Connectors:** Type N connectors per MIL-STD-348 interface dimensions - mate - nondestructively with MIL-C-39012 connectors. SMK (2.92mm) connectors mate nondestructively with SMA per MIL-C-39012, 3.5mm, SMK, and other 2.92mm.

<u>Options</u>	<u>Description</u>	<u>Options</u>	<u>Description</u>
1	SMK, Female	3	Type N, Female
2	SMK, Male	4	Type N, Male

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

Weight: 280 g (10 oz) maximum

### **Physical Dimensions:**



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

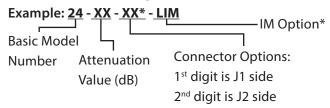


# **Fixed Coaxial Attenuators** Model 24, Medium Power, N & SMK Connectors

Bi-Directional Design

dc to 8.5 GHz 50 Watts

### **Model Number Description:**



<sup>\*</sup>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.