



Model 24 Medium Power Fixed Coaxial Attenuators

dc to 8.5 GHz
50 Watts

Bi-Directional Design!



Features

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

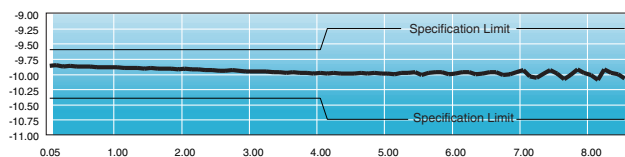
Specifications

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: dc to 8.5 GHz

MAXIMUM DEVIATION OVER FREQUENCY (dB):

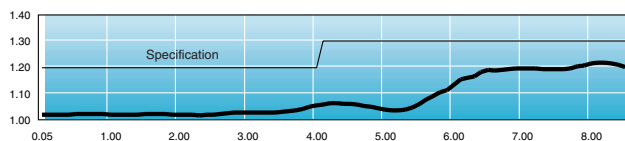
Nominal ATTN (dB)	dc-4 GHz		4 - 8.5 GHz	
	24	24-LIM	24	24-LIM
3, 6	± 0.40	---	± 0.75	---
10, 20	± 0.40	± 0.50	± 0.75	± 1.00
30, 40	± 0.60	± 0.70	± 1.00	± 1.25



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 with Type N Connectors. 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 μ sec 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 and TNC connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. 2.92mm connectors - mate non-destructively with SMA per MIL-C-39012, 3.5mm, K Θ , and other 2.92mm. GPC-7 connectors per IEEE-STD-287.

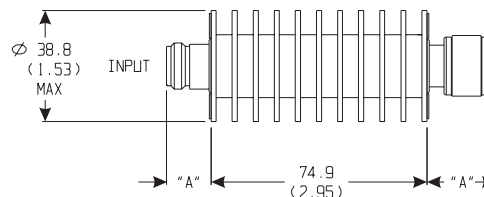
K Θ is a registered Trademark of Anritsu Wiltron 2.92mm connector.

Options	Description	Options	Description
1	SMA, Female	5	GPC7
2	SMA, Male	6	TNC Female
3	Type N, Female	7	TNC 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)	GPC7	21.0 (0.83)
N Female	15.0 (0.59)	TNC Female	38.1 (1.50)
2.92mm Female	14.0 (0.55)	TNC Male	35.1 (1.38)
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:

24 - XX - XX* - LIM

Basic Model
Number

Attenuation
Value (dB)

Connector Options
1st digit is J1 side
2nd digit is J2 side

IM Option**

*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 with Type N connectors and is not available through Express.