



# Model 45 Model 58 High Power Fixed Coaxial Attenuators Convection Cooled

dc to 1.5 GHz dc to 5.0 GHz 250 Watts





## **Features**

- // Quality connectors with special high temperature support beads.
- // Designed to meet environmental requirements of MIL-A-3933.

# **Specifications**

NOMINAL IMPEDANCE: 50  $\Omega$ 

**FREQUENCY RANGE:** Model 45: dc to 1.5 GHz

Model 58: dc to 5.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:				
Nominal	Deviation (dB)			
ATTN (dB)	45	58	58 LIM	
3*, 6	<u>+</u> 0.50	<u>+</u> 1.50		
10, 20	<u>+</u> 0.50	<u>+</u> 1.50	<u>+</u> 2.00	
30. 40	+ 0.50	+ 1.75	+ 3.00	

MAXIMUM SWR:		
Frequency (GHz)	Input	Output
dc - 2 (1.5*)	1.10	1.20 (1.10*)
2 - 5	1.15	1.25

<sup>\*</sup> Model 45 only!

**3rd ORDER INTERMODULATION (58-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.

# PHYSICAL DIMENSIONS:

POWER RATING (mounted horizontally with fins vertical): 250 watts average (unidirectional) to  $55^{\circ}\text{C}$  ambient temperature, derated linearly to 10%@  $125^{\circ}\text{C}$ . 10 kilowatt peak (5 µsec pulse width; 1.25% duty cycle). Maximum power rating into output port is 50 watts average. Note: Model 45-3-XX is rated for 500 Watts average (unidirectional) into the input and 250 Watts average (maximum) into the output port.

POWER COEFFICIENT: <0.0001 dB/dB/watt
TEMPERATURE COEFFICIENT: <0.0004 dB/dB/°C

TEMPERATURE RANGE: -55°C to 125°C

**CALIBRATION:** Insertion loss test data supplied at 0.05, 1, 2, 3, 4 and 5 GHz (Model 45 at 0.05 and 1.5 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.

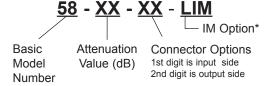
Connector Options	Type/Description	
3	Type N, Female	
4	Type N, Male	

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

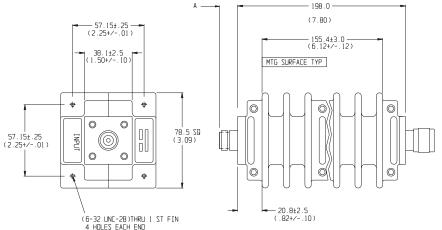
WEIGHT: 1,530 g (6 lbs, 3 oz.) maximum

## MODEL NUMBER DESCRIPTION:

# Example:



\*Add -LIM for Low Intermodulation option. Option only available with Model 58 in 10, 20, 30, 40 dB and is not available through Express.



Connector	DIM A
N Male	22.9 (0.90)
N Female	15.0 (0.59)

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

10/23/01