



ABN 43 064 478 842

231 Osborne Avenue Clayton South, VIC 3169  
PO Box 1548, Clayton South, VIC 3169  
t 03 9265 7400 f 03 9558 0875  
freecall 1800 680 680  
www.tmgtestequipment.com.au

## Test & Measurement

- > sales
- > rentals
- > calibration
- > repair
- > disposal

## Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can call us for FREE!

TMG Corporate Website

TMG Products Website



Click-to-Call  
TMG Now



Product Lifecycle Management System

### Disclaimer:

All trademarks appearing within this PDF are trademarks of their respective owners.





## Model 33 Medium Power Fixed Coaxial Attenuator

dc to 8.5 GHz  
25 Watts

**Bi-directional Design!**



### Features

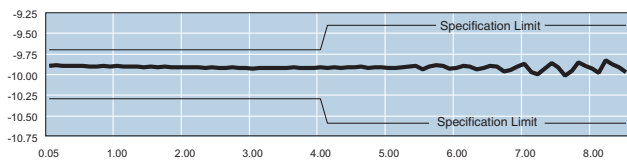
- Quality Connectors with special high temperature support beads.
- Designed to meet environmental requirements of MIL-A-3933.
- Low Intermodulation option available.
- Mode free operation to 10 GHz.

### Specifications

NOMINAL IMPEDANCE: 50 Ω

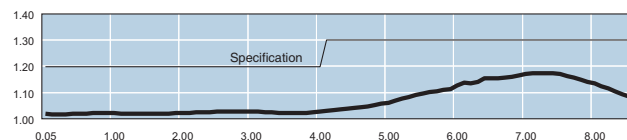
FREQUENCY RANGE: dc to 8.5 GHz

Nominal ATTN (dB)	dc-4 GHz		4 - 8.5 GHz	
	33	33-LIM	33	33-LIM
3, 6	± 0.30	---	± 0.60	---
10, 20	± 0.30	± 0.40	± 0.60	± 0.70
30	± 0.60	± 0.70	± 1.00	± 1.20



Typical Attenuation Accuracy of a 33-10-34

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



Typical SWR of a 33-10-34

**3rd ORDER INTERMODULATION (33-XX-XX-LIM Only):** Reflected Levels (IM3), -100 dBc and Through Levels (IM3), -110 dBc with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +41 dBm each. IM specification at J2 limited to 10 Watts of input power.

**POWER RATING (mounted horizontally):** 25 watts average (bi-directional) to 25°C ambient temperature, derated linearly to 2.5 watts @ 125°C. Note: 3 dB model can handle 50 Watts average (bi-directional). 5 kilowatt peak (5 μsec pulse width; 0.25% duty cycle).

**POWER COEFFICIENT:** <0.0006 dB/dB/watt

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

**TEMPERATURE RANGE:** -55 °C to 125 °C

**TEST DATA:** Insertion loss test data supplied at 0.05, 4.0, and 8.0 GHz. Other test data can be provided at additional cost.

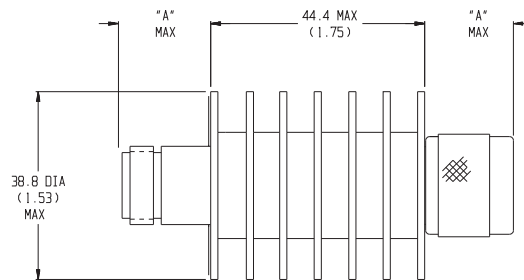
**CONNECTORS:** Type N & 2.92mm connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

Options	Description	Options	Description
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:** 170 g (6 oz.) maximum

**PHYSICAL DIMENSIONS:**

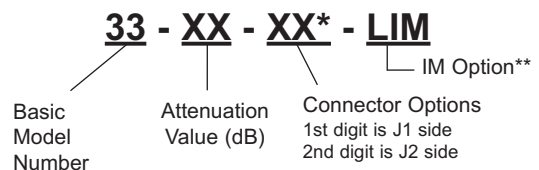


Connector	DIM A	Connector	DIM A
N Male	22.9 (0.90)	2.92mm Female	14.0 (0.55)
N Female	15.0 (0.59)	2.92mm Male	

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. Available in only 10, 20, 30 dB and is not available through Express.

