

# Variable Attenuator

VA02-VA05

VA02: DC - 2.0 GHz

VA03: DC - 3.0 GHz

VA04: DC - 4.0 GHz

VA05: DC - 5.0 GHz

5 WATTS



## Features

SMA and Type N stainless steel M/F connectors per MIL-STD-348A, interface dimensions mate nondestructively with MIL-PRF-39012. Designed to meet MIL-DTL-3933 environmental specification. Features wide attenuation range, low residual insertion loss, and a long life.

## Specifications

**Nominal Impedance:** 50 ohms.

**Frequency Range:** VA02: DC - 2.0 GHz.

VA03: DC - 3.0 GHz.

VA04: DC - 4.0 GHz.

VA05: DC - 5.0 GHz.

**Power Sensitivity:** < 0.005 dB/dB/W;  
Bidirectional in power.

**Power Rating:** 5 W maximum rated average power to 40°C ambient temperature, de-rated linearly to 0 W at 85°C **500 W** peak power (5  $\mu$ sec pulse width, 0.5% duty cycle).

**Temperature Range:**

Operating: 0°C to +85°C

Non-Operating: -55°C to +125°C

**Temperature Coefficient:** < 0.001 dB/dB/°C.

**Construction:** Stainless steel connectors, rugged construction, O-ring seal for faceplate. RoHS Compliant.

**Calibration:** Dial Calibrated in 1 dB increments at the mid-band frequency. (Dial is for reference only)

**Rugged Construction:** Designed and tested to meet the environmental requirements of MIL-DTL-24215.

## Attenuation Range:

VA02: 60, 90, 100, or 115 dB

VA03: 60, or 90 dB

VA04: 60, or 90 dB

VA05: 60 dB

(Dial is engraved 6-66; 6-96 etc.)

## Resolution:

60 dB ~180°

90 dB ~240°

100 dB ~270°

115 dB ~285°

**Options:** Rack Mount Kit, Bench Top Stand

Frequency (GHz)	VSWR (Max)			
	VA02	VA03	VA04	VA05
DC - 1.0	1.5	1.5	1.5	1.6
1.0 - 2.0	1.6	1.6	1.6	1.7
2.0 - 3.0	N/A	1.7	1.7	1.8
3.0 - 5.0	N/A	N/A	1.8	1.9

Attenuation Ranges	Insertion Loss (dB), Nominal			
	VA02	VA03	VA04	VA05
60-115 dB	6	6	6	6

## Dimensions:

**Weight:** 1.13 (39.86)

Connector Option	DIM "A" mm (in.)	DIM "B" mm (in.)
-0304	66.0 (2.6)	68.1 (2.68)
-0404	66.0 (2.6)	71.9 (2.83)
-0303	61.0 (2.4)	68.1 (2.68)
-0102	55.6 (2.19)	58.2 (2.29)
-0202	55.6 (2.19)	61.5 (2.42)
-0101	52.3 (2.06)	58.2 (2.29)

*Note: Dimensions are given in mm (in), or g (oz). Weight figure is nominal, with our standard connector configuration. Additional connector options may be available.*

# WEINSCHEL ASSOCIATES



TEL: 877.948.8342 / 301.963.4630 ♦ Fax: 301.963.8640

WEB: <http://www.WeinschelAssociates.com>

EMAIL: [sales@WeinschelAssociates.com](mailto:sales@WeinschelAssociates.com)

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Specification  
Subject to change  
without notice