



**Model: AE-AB00-40V**

Description:	Voltage Controlled PIN Attenuator
Operating Frequency:	250 - 770 MHz
Phase-Invariant Frequency Region (<±10 Deg):	370 - 700 MHz
Insertion Loss (0dB Attn. Ref.):	1.7 dB Max
Attenuation Range:	0 – 40 dB Nominal Min
Attenuation Flatness:	0.6 dB Peak-Peak ..... up to 10 dB
	1.0 dB Peak-Peak ..... up to 20 dB
	1.4 dB Peak-Peak ..... up to 30 dB
	1.6 dB Peak-Peak ..... up to 40 dB
Control Function:	0 – 4 V, 10dB/Volt, (Impedance = 5~10K)
Transfer Function Accuracy:	0 – 0.8 dB ..... ±50% Max
	> 0.8 – 10 dB ..... ±0.40 dB Max
	>10 - 30 dB ..... ±0.50 dB Max
	> 30 - 40 dB ..... ±0.90 dB Max
VSWR (all settings):	1.6:1 Max
Settling Time (“±1dB of Target Setting”):	750 ns Max, (10µs<PW<0.1s)
Power Handling:	Operating ..... +10 dBm CW/Peak Max
	Survival ..... +30 dBm CW/AVG Max
Connectors (RF):	SMA (f), Removable
Connector (Supply & Controls):	Solder Pins
Temperature Coefficient (over -20°C to +75°C):	±0.025dB/°C Max
Power Supply (internally regulated):	+12 to +15vdc @ 60mA Max
Impedance:	50 Ohms Nominal
Quality:	Best-Commercial-Grade

**Environmental Ratings:**

Temperature:	{Operating: -40°C to +85°C} & {Storage: -50°C to +100°C}
Humidity:	MIL-STD-202F, Method 103B, Cond. B (96 hours at 95% R.H.)
Shock:	MIL-STD-202F, Method 213B, Cond. B (75G, 6mSec)
Vibration:	MIL-STD-202F, Method 204D, Cond. B (.06” double amplitude, or 15G)
Altitude:	MIL-STD-202F, Method 105C, Cond. B (50,000 Feet)
Temp. Shock:	MIL-STD-202F, Method 107D, Cond. A (5 cycles)

**Available Options:**

(Units with listed options here may be subject to some specification tradeoffs from the standard, consult factory)

- RF Connectors
  - B1 [ J1 SMA (male) ]
  - B2 [ All SMA (male) ]
- Control Connector
  - C1 [ SMC (Jack), 50 Ω ]
  - C2 [ SMB (Jack), 50 Ω ]
  - C3 [ SMA (female) ]
- Transfer Functions
  - F1 [ Slope = 5dB/Volt ]
  - F3 [ Reverse Control Voltage (0V = Max Attenuation) ]
- Attenuation Range
  - G1 [ 30dB Range / Slope = 5dB / Volt ]



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**Outline**

(Tolerances:  $\pm 0.015"$  [0.38mm])

