



**Model: AE-D000-40V**

Description:	Voltage Controlled PIN Attenuator	
Operating Frequency:	1.5 – 4.3 GHz	
Phase-Invariant Frequency Region (<math>\pm 10</math> Deg):	1.95 – 3.8 GHz	
Insertion Loss (0dB Attn. Ref.):	1.8 dB Max	
Attenuation Range:	0 – 40 dB Nominal Min	
Attenuation Flatness:	0.5 dB Peak-Peak	up to 10 dB
	0.9 dB Peak-Peak	up to 20 dB
	1.2 dB Peak-Peak	up to 30 dB
	1.5 dB Peak-Peak	up to 40 dB
Control Function:	0 – 4 V, 10dB/Volt, (Impedance = 5~10K)	
Transfer Function Accuracy:	0 – 0.8 dB	$\pm 50\%$ Max
	> 0.8 – 10 dB	$\pm 0.40$ dB Max
	> 10 - 30 dB	$\pm 0.50$ dB Max
	> 30 - 40 dB	$\pm 0.90$ dB Max
VSWR (all settings):	1.7:1 Max	
Settling Time (“ $\pm 1$ dB of Target Setting”):	500 ns Max, ( $5\mu s < PW < 0.1s$ )	
Power Handling:	Operating	+20 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):	$\pm 0.025$ dB/°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)

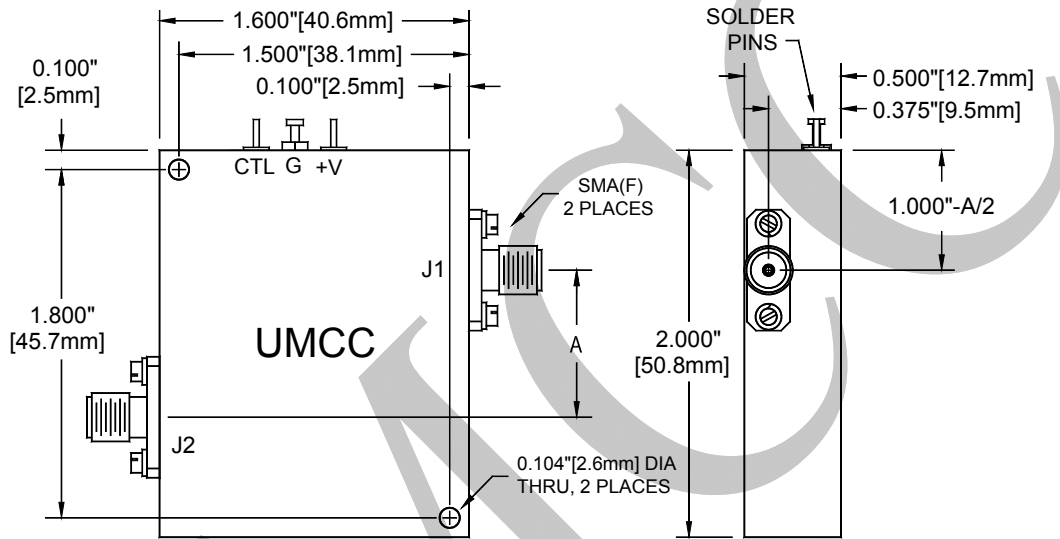
- RF Connectors
  - B1 [ J1 SMA (male) ]
  - B2 [ All SMA (male) ]
- Control Connector
  - C1 [ SMC (Jack), 50  $\Omega$  ]
  - C2 [ SMB (Jack), 50  $\Omega$  ]
  - C3 [ SMA (female) ]
- Transfer Functions
  - F1 [ Slope = 5dB/Volt ]
  - F3 [ Reverse Control Voltage (0V = Max Attenuation) ]
- Attenuation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



Model: AE-D000-40V

### Outline

( "A" = 0.760" [19.3mm] )



Weight	Tolerances
2.2 oz [62.4 g]	±0.015" [±0.38mm]