Universal Microwave Components Corp.
5702-D General Washington Drive Alexandria, VA 22312 <> Web: www.umcc111.com
E-mail: sales@umcc111.com <> Tel: (703) 642-6332 <> Fax: (703) 642-2568

Model: AT-D000-HV

Description:		Voltage Controlled PIN Attenuator
Operating Frequency:		2 - 4 GHz
Insertion Loss (0dB Attn. Ref.):		1.7dB Max
Attenuation Range:		0 - 60dB Nominal Min
Attenuation Flatness:	0.6 dB PK-PK	up to 10 dB
	1.6 dB PK-PK	up to 20 dB
	2.8 dB PK-PK	up to 40 dB
	3.0 dB PK-PK	up to 50 dB
	3.4 dB PK-PK	up to 60 dB
Control Function:		0–6 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 - 50 dB	±0.90 dB Max
	> 50 - 60 dB	±1.20 dB Max
VSWR (all settings):		1.45:1 Max
Settling Time ("±1dB of Target Setting"):		500 ns Max, (5µs<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 Operating Temperature)		±0.025dB/°C Max
Power Supply (internally regulated):		+12 to +15vdc @ 60mA Max
		-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)]
- Control Impedance
  - D1 [50 Ω, Internally Terminated]
- 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

("A" = 0.760" [19.3mm] <> Tolerances: ±0.015" [0.38mm] <> Weight = 2.2 oz [62.4g])