



Model: AT-N000-HV

Description:	Voltage Controlled PIN Attenuator
Operating Frequency:	8 - 18 GHz
Insertion Loss (0dB Attn. Ref.):	3.3 dB Max
Attenuation Range:	0 - 60dB Nominal Min
Attenuation Flatness:	1.6 dB PK-PK up to 10 dB
	2.0 dB PK-PK up to 20 dB
	2.6 dB PK-PK up to 30 dB
	3.2 dB PK-PK up to 40 dB
	3.4 dB PK-PK up to 50 dB
	3.6 dB PK-PK up to 60 dB
Control Function:	0-6 V, 10dB/Volt, (Impedance = 5~10K)
Transfer Function Accuracy:	0 - 0.8 dB $\pm 50\%$ 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):	1.9:1 Max
Settling Time ("±1dB 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 Operating Temperature)	± 0.025 dB/°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" = 0.214" [5.4mm] <> Tolerances: ± 0.015 " [0.38mm] <> Weight = 2.2 oz [62.4g])

