



**Model: AG-N800-HD**

Description:	.....	Digital Controlled PIN Attenuator
Operating Frequency:	.....	8 - 18 GHz
Insertion Loss (0dB Attn. Ref.):	.....	3.9 dB Max
Attenuation Range:	.....	0 – 80 dB Nominal Min
Attenuation Flatness:	.....	1.0 dB PK-PK ..... up to 10 dB
.....	.....	2.4 dB PK-PK ..... up to 20 dB
.....	.....	4.4 dB PK-PK ..... up to 40 dB
.....	.....	5.0 dB PK-PK ..... up to 80 dB
Control Function:	.....	9 Bit Positive Binary TTL (LSB=0.25dB, MSB=64dB)
Transfer Function Accuracy (Mean Value):	.....	0 – 0.8 dB ..... ±50% Max
.....	.....	> 0.8 – 10 dB ..... ±0.50 dB Max
.....	.....	> 10 - 30 dB ..... ±0.60 dB Max
.....	.....	> 30 - 50 dB ..... ±1.00 dB Max
.....	.....	> 50 - 70 dB ..... ±1.25 dB Max
.....	.....	> 70 - 80 dB ..... ±1.50 dB Max
VSWR (all settings):	.....	2.0:1 Max
Settling Time (“±1dB of Target Setting”):	.....	1µs 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):	.....	15-Pin D-Type Male
Temperature Coefficient (over -20°C to +75°C):	.....	±0.025dB/°C Max
Power Supply (internally regulated):	.....	+12 to +15vdc @ 70mA 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) ]

■ Transfer Functions

- F3** [ Inverse Logic (“00...00” = Max Attenuation) ]

■ Control Function Resolution

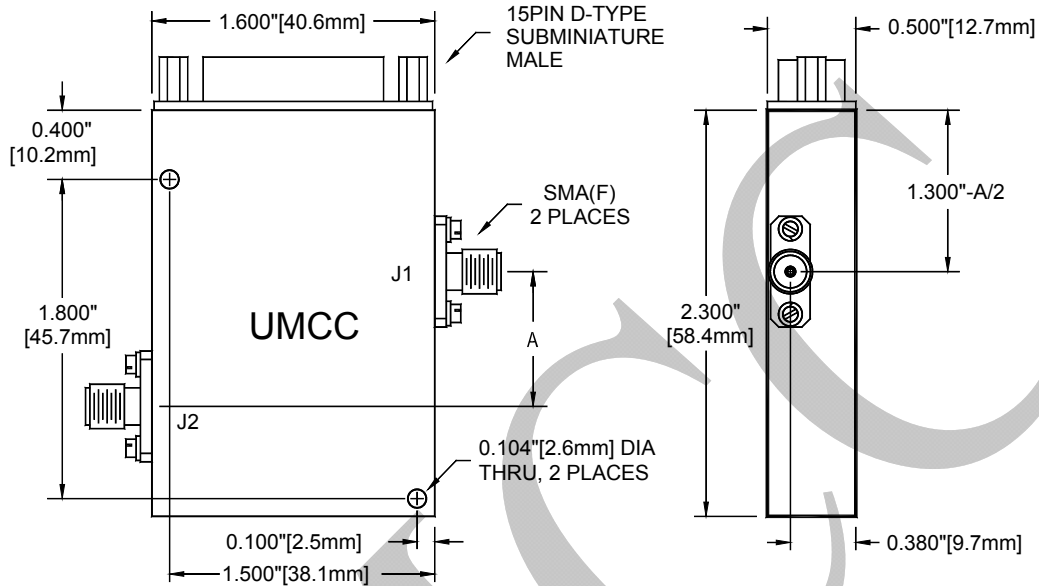
- E1** [ LSB = 1/8 dB <> 10-Bits <> “fractional steps” ]
- R1** [ LSB = 0.1 dB <> 10-Bits <> “decimal steps” ]
- E2** [ LSB = 1/16 dB <> 11-Bits <> “fractional steps” ]
- R2** [ LSB = 0.05 dB <> 11-Bits <> “decimal steps” ]
- E3** [ LSB = 1/32 dB <> 12-Bits <> “fractional steps” ]



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**Outline**

( "A" = 0.214" [ 5.4mm ] )



Weight	Tolerances
2.4 oz [ 68g ]	±0.015" [ ±0.38mm ]

Pin-Out Function	
PIN	Function
1	N/C
2	N/C
3	N/C
4	0.25 dB
5	0.5 dB
6	1.0 dB
7	2.0 dB
8	4.0 dB
9	8.0 dB
10	16.0 dB
11	32.0 dB
12	64.0 dB
13	+Vdc
14	N/C
15	GND (Chassis & Digital)

