



Model: AG-U000-60D

Description:..... Digital Controlled PIN Attenuator
Operating Frequency:..... 0.5 – 18 GHz
Insertion Loss (0dB Attn. Ref.):..... 5.7 dB Max
Attenuation Range:..... 0 - 60 dB Nominal
Attenuation Flatness:

Attenuation (dB):	≤ 10	≤ 20	≤ 30	≤ 40	≤ 50	≤ 60
Flatness(dB): Peak-Peak Max	1.2	1.5	2.8	3.8	4.7	6.0

Control Function:..... 8 Bit Positive Binary TTL
..... (LSB = 0.25dB, MSB = 32dB)
Transfer Function Accuracy:..... 0 – 30 dB..... ±0.5 dB Max
..... >30 – 60 dB..... ±1.0 dB Max
VSWR (all settings):..... 1.9:1 Max
Settling Time (“±1dB of Target Setting”):..... 1µs Max (10µs<PW<0.1S)
Power Handling: Operating..... +20 dBm CW/Peak Max
..... Survival..... +30 dBm CW/Avg Max
Temperature Coefficient (Over Operating Range):..... ±0.025 dB/°C
Power Supply (internally regulated):..... +12 to +15Vdc @ 150 mA Max
Connectors (RF):..... SMA (female), Removable
Connector (Supply & Controls):..... 15-Pin D-Type Male
Impedance (Nominal):..... 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)]

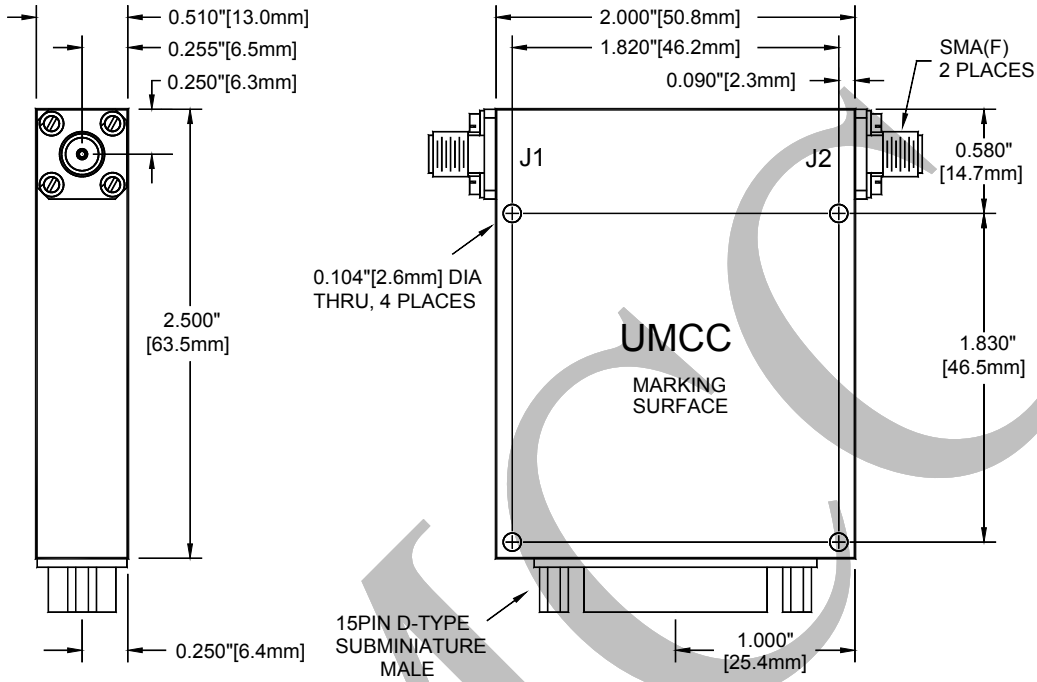
■ Control Function Resolution

- E1 [LSB = 1/8 dB <> 9-Bits <> “fractional steps”]
- R1 [LSB = 0.1 dB <> 10-Bits <> “decimal steps”]
- E2 [LSB = 1/16 dB <> 10-Bits <> “fractional steps”]
- R2 [LSB = 0.05 dB <> 11-Bits <> “decimal steps”]
- E3 [LSB = 1/32 dB <> 11-Bits <> “fractional steps”]
- E4 [LSB = 1/64 dB <> 12-Bits <> “fractional steps”]



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Outline



Weight	Tolerances
3.2 oz [90.7g]	±0.015" [±0.38mm]

Pin-Out Function

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

