

## DESCRIPTION

AMC MODEL AGTN-2000-60DD-100 IS A HIGH SPEED, BROAD BAND, VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 8 BIT POSITIVE TRUE BINARY LOGIC.

## SPECIFICATIONS

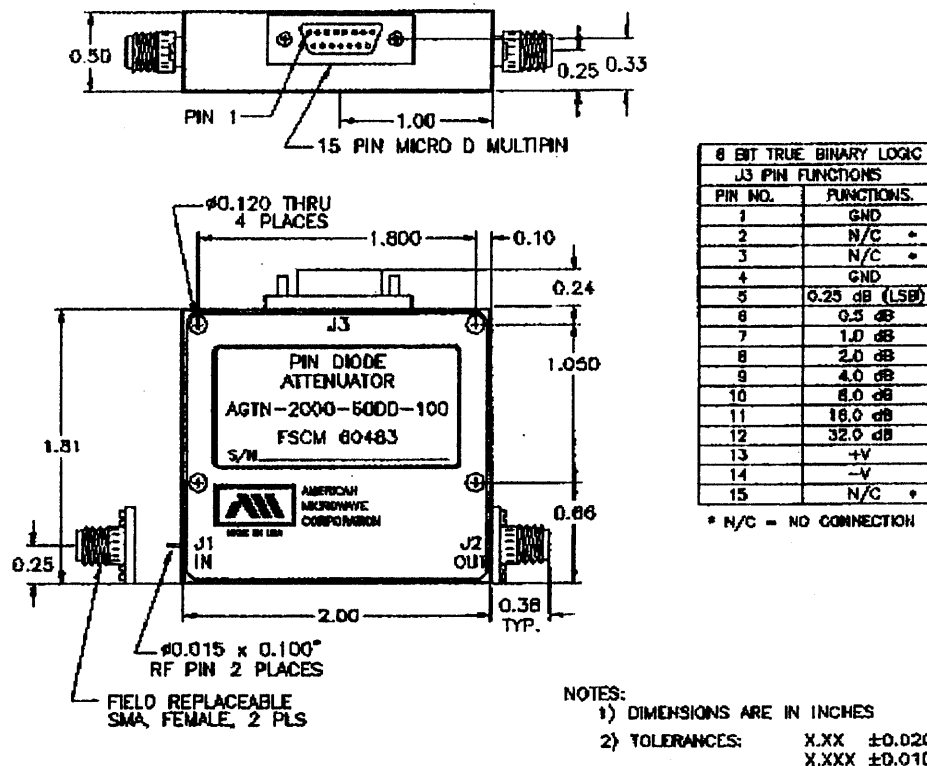
- FREQUENCY RANGE ..... 100 MHz - 2.0 GHz MINIMUM
- INSERTION LOSS ..... 2.5 dB MAXIMUM
- ATTENUATION FLATNESS  
(± dB MAXIMUM) ..... 0-30 dB ±0.5 dB MAXIMUM  
30-50 dB ±1.5 dB MAXIMUM  
50-60 dB ±2.5 dB MAXIMUM
- ATTENUATION ACCURACY ..... 0-10 dB ±2.0 dB MAXIMUM  
10-20 dB ±1.0 dB MAXIMUM  
20-50 dB ±1.5 dB MAXIMUM  
50-60 dB ±2.0 dB MAXIMUM
- SWITCHING TIME ..... <1 μsec (500 nsec TYPICAL)
- VSWR ..... 2.0:1 MAXIMUM, 1.75 TYPICAL  
(@ 0dB ATTENUATION)
- RF POWER RATINGS  
OPERATING ..... +10 dBm CW MAXIMUM,  
+20 dBm TYPICAL  
SURVIVAL ..... +30 dBm CW MAXIMUM
- CONTROL ..... 8 BIT TRUE BINARY LOGIC
- POWER SUPPLY ..... +12VDC @ 250 mA MAXIMUM  
(210 mA TYPICAL)  
-12VDC @ 50 mA MAXIMUM  
(30 mA TYPICAL)
- CONNECTORS  
RF INPUT/OUTPUT ..... SMA FEMALE  
POWER AND CONTROLS ..... 15 PIN MICRO-D SUBMINIATURE  
MATING CONNECTOR FURNISHED
- SIZE ..... 2.00" x 1.81" x 0.50"

## AVAILABLE OPTIONS

- 10M2 ..... EXTENDED FREQUENCY RANGE: 10 MHz TO 2 GHz
  - 50M2 ..... EXTENDED FREQUENCY RANGE: 50 MHz TO 2 GHz
  - A01 ..... TWO SMA MALE RF CONNECTORS
  - A02 ..... J1 SMA MALE, J2 SMA FEMALE
  - A03 ..... FOR EXTENDED FREQUENCY RANGE UNITS OF  
2-18 GHz, 2-19 GHz, 0.3-18 GHz, 0.2-18 GHz,  
10 MHz-18 GHz REFER TO AGT-2018-60DD-100 (SLIM LINE)  
DATA SHEET. FOR ANALOG VOLTAGE CONTROLLED UNITS WITH SOLDER  
PINS REFER TO AGT-2018-60D-100 (SLIM LINE).
  - A04 ..... MOUNTING SURFACE UNPAINTED
  - A05 ..... ±15 VDC POWER SUPPLY
  - A06 ..... 0 TO 30 dB RANGE
  - A07 ..... FOR HIGH SPEED UNITS OF ≤ 1 μsec AND EXTENDED FREQUENCY  
RANGES OF 2-18 GHz, 2-19 GHz, 0.3-18 GHz, AND  
0.2-18 GHz REFER TO DATA SHEETS AGTN-2018-60DD-100  
(SLIM LINE). FOR ANALOG VOLTAGE CONTROLLED UNIT WITH  
SOLDER PINS REFER TO AGTN-2018-60D-100 (SLIM LINE)
  - A08 ..... ANALOG CONTROLLED UNIT-10dB/VOLT PIN 2 IS USED  
AS CONTROL (OTHER CONTROL VOLTAGES AVAILABLE).  
FOR SOLDER PIN UNITS REFER TO AGTN-2000-60D-100  
(SLIM LINE)
  - A09 ..... 9 BIT TRUE BINARY LOGIC
  - A10 ..... 10 BIT TRUE BINARY LOGIC
  - A11 ..... 11 BIT TRUE BINARY LOGIC
  - A12 ..... 12 BIT TRUE BINARY LOGIC
  - A13 ..... BLIND MATE CONNECTORS
  - SDS ..... SPECIAL CUSTOMER SPECIFICATION
- NOTED: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	5/11/98	<i>[Signature]</i>

## MECHANICAL OUTLINE



## ENVIRONMENTAL RATINGS

- TEMPERATURE ..... -55°C TO +125°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE ..... MIL-STD-202F, METHOD 107D COND. A

		<b>AMERICAN MICROWAVE CORPORATION</b> 7311G GROVE RD., FREDERICK, MD. 21704 TEL: (301) 682-4700 FAX: (301) 662-4938		
		<b>PRODUCT FEATURE</b> <b>AGTN-2000-60DD-100</b> 100 MHz-2 GHz, HIGH SPEED, PROGRAMMABLE VARIABLE ATTENUATOR		
APPROVALS DRAWN: <i>WJP</i> CHECKED: <i>P.A.</i>	DATE 5/11/98 5/12/98	SIZE A	SHEET 1 OF 2	DWG # 100-4228-2