

## DESCRIPTION

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

## SPECIFICATIONS

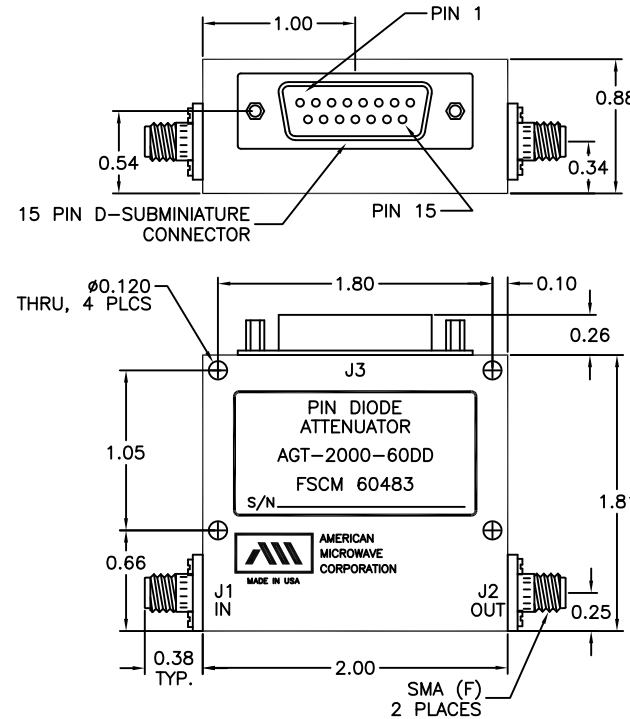
- FREQUENCY RANGE ..... 30 MHz – 2.0 GHz MINIMUM
- INSERTION LOSS ..... 3.2 dB MAXIMUM
- ATTENUATION FLATNESS  
(± dB MAXIMUM) ..... 0-30 dB ±0.5 dB MAXIMUM  
30-50 dB ±1.5 dB MAXIMUM  
50-60 dB ±2.5 dB MAXIMUM
- ATTENUATION ACCURACY ..... 0-10 dB ±2.0 dB MAXIMUM  
10-20 dB ±1.0 dB MAXIMUM  
20-50 dB ±1.5 dB MAXIMUM  
50-60 dB ±2.0 dB MAXIMUM
- SWITCHING TIME ..... ON: 25 μsec OFF: 10 μsec
- 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 D-SUBMINIATURE (MALE)  
MATING CONNECTOR FURNISHED
- SIZE ..... 2.00" x 1.81" x 0.88"

## AVAILABLE OPTIONS

- 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 AGT-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
- SCS ..... SPECIAL CUSTOMER SPECIFICATION

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 408185	4/28/99	
B		SEE ECR# 10-028	7/6/10	Rd



8 BIT TRUE BINARY LOGIC	
J3 PIN FUNCTIONS	
PIN NO.	FUNCTIONS.
1	GND
2	N/C *
3	N/C *
4	GND
5	0.25 dB (LSB)
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	+V
14	-V
15	N/C *

\* N/C = NO CONNECTION

## ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... -40°C TO +85°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

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\* Units are designed to meet Environmental ratings but not tested. If Environmental Testing is required, please contact Sales Department.

## AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-4700 FAX: 301-662-4938  
WEBSITE: [www.americammicrowavecorp.com](http://www.americammicrowavecorp.com)  
E-MAIL: [sales@americammicrowavecorp.com](mailto:sales@americammicrowavecorp.com)  
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN WSP		4/28/99	PRODUCT FEATURE AGT-2000-60DD			
ENG Rd		7/6/10	10 MHz TO 2 GHz, PROGRAMMABLE VARIABLE ATTENUATOR			
QAE K JPMMS		7/6/10	SIZE A	FSCM NO. 60483	DWG NO. 100-3127-2	REV. B
			SCALE N:S			SHEET 1 OF 3

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010  
WEIGHT: APPROX. 4.0 oz.