

## DESCRIPTION

AMC MODEL NUMBER AGTN-2018-60DD-100 OPTION ES IS A 2 TO 18 GHz, 55 dB DYNAMIC RANGE, RF ATTENUATOR.

## SPECIFICATIONS

- FREQUENCY RANGE ..... 2.0-18.0 GHz MINIMUM
- DYNAMIC RANGE ..... 55 dB MINIMUM
- RF INPUT POWER ..... +15 dBm OPERATE, +30 dBm DESTRUCT
- INSERTION LOSS ..... NOT GREATER THAN 5 dB
- HARMONICS ..... -50 dBc
- VIDEO FEEDTHRU ..... 5 mv MAXIMUM @ 100 MHz BANDWIDTH
- VSWR ..... 2.0:1 MAXIMUM
- BIT ACCURACY ..... ATTENUATION STEPS TO BE ACCURATE WITHIN  
±25% AT ANY SINGLE FREQUENCY.
- ATTENUATION FLATNESS ..... 0-32 dB @ ±2.5 dB MAXIMUM  
32-64 dB @ ±4 dB MAXIMUM
- ATTENUATION RESOLUTION ..... 0.25 dB
- LINEARITY ..... <10% DIFFERENCE FROM BEST FIT STRAIGHT LINE
- MONOTONICITY ..... GUARANTEED
- SWITCHING SPEED ..... <1.0 μSEC FROM ANY SETTING TO ANY OTHER SETTING  
TO WITHIN 0.5 dB OF FINAL ATTENUATION
- TEMPERATURE STABILITY ..... <0.03 dB PER DEGREE CENTIGRADE
- OPERATING TEMPERATURE ..... -40 TO +85 DEGREES CENTIGRADE
- POWER SUPPLIES ..... ±15 VOLTS DC
- CONTROL ..... 8-BIT BINARY
- CONNECTORS ..... MICROWAVE: SMA FEMALE  
CONTROL: DA-15P WITH JACK POST ASSEMBLY (ITT CANNON)

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

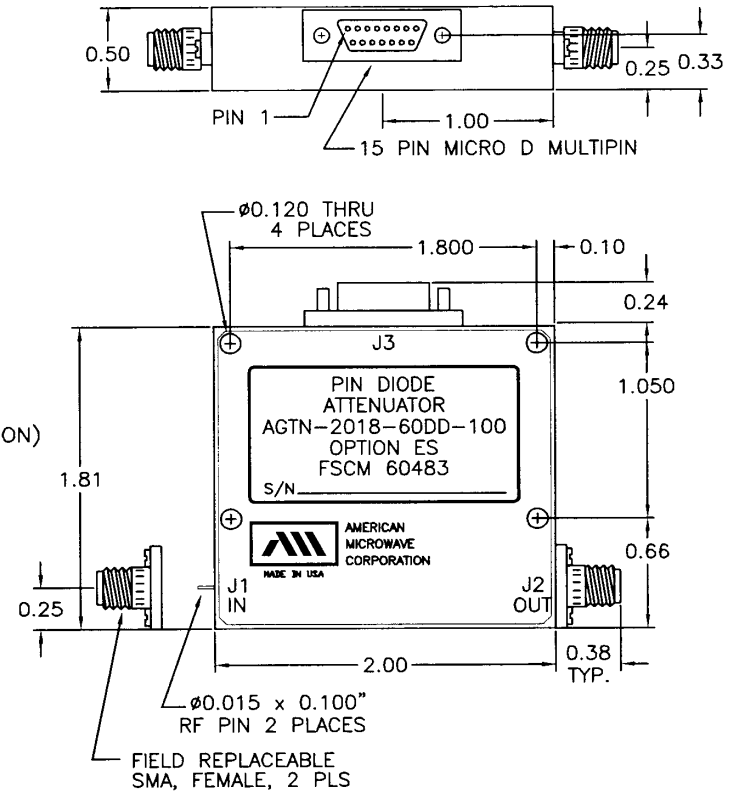
- TEMPERATURE ..... -55°C TO +125°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE .....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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION


ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.010  
X.XXX ±0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-		ORIGINAL RELEASE, JOB# 310193PEX	11/12/03	

## MECHANICAL OUTLINE



**CONFIDENTIAL AND PROPRIETARY**

APPROVALS		DATE	 AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
DRAWN <i>WPLS</i>		11/12/03	TITLE PRODUCT FEATURE AGTN-2018-60DD-100 OPTION ES	
CHECKED			SIZE A	FSCM NO. 60483
ISSUED			DWG NO. 100-6848	REV. -
SCALE N:S			SHEET 1 of 3	