

## DESCRIPTION

AMC MODEL AGTN-2018-60DD-100 OPT. 518, A06 IS A BROAD BAND VARIABLE ATTENUATOR / MODULATOR, CONTROLLED BY 8 BIT POSITIVE TRUE BINARY LOGIC.

## SPECIFICATIONS

- FREQUENCY RANGE ..... 5.0-18.0 GHz MINIMUM
- INSERTION LOSS ..... 4.5 dB MAXIMUM
- ATTENUATION FLATNESS  
(± dB MAXIMUM) ..... 0-15 dB ±0.5 dB MAXIMUM  
15-20 dB ±1.0 dB MAXIMUM  
20-25 dB ±1.5 dB MAXIMUM  
25-30 dB ±2.0 dB MAXIMUM
- ATTENUATION ACCURACY ..... 0-10 dB ±2.0 dB MAXIMUM  
10-20 dB ±1.0 dB MAXIMUM  
20-30 dB ±1.5 dB MAXIMUM
- SWITCHING TIME ..... <1 μsec (500 nsec TYPICAL)
- VSWR ..... 2.2:1 MAXIMUM
- RF POWER RATINGS  
OPERATING ..... +20 dBm CW MAXIMUM  
+10 dBm (0.3 GHz OR BELOW)
- SURVIVAL ..... +30 dBm CW MAXIMUM  
+27 dBm (0.3 GHz OR BELOW)
- CONTROL ..... 8 BIT TRUE BINARY LOGIC
- POWER SUPPLY ..... +12VDC @ 250 mA MAXIMUM, 210mA TYPICAL  
-12VDC @ 50 mA MAXIMUM, 30 mA TYPICAL
- CONNECTORS  
RF INPUT/OUTPUT ..... SMA FEMALE  
POWER AND CONTROLS ..... 15 PIN MICRO-D SUBMINIATURE (MALE)  
MATING CONNECTOR FURNISHED
- SIZE ..... 2.00" x 1.81" x 0.50"

## AVAILABLE OPTIONS

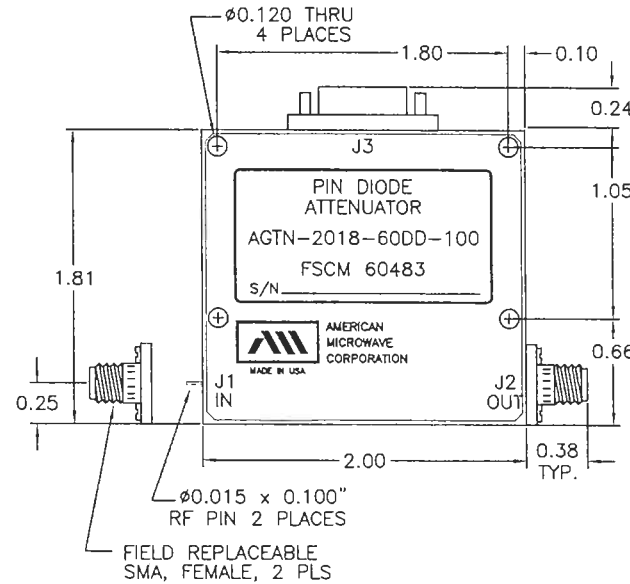
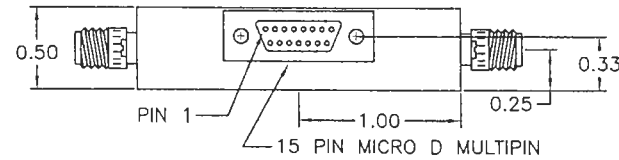
- A06 ..... 0 TO 30 dB RANGE  
 FLATNESS: 0 - 15dB: ±0.5dB ACCURACY: 0 - 10dB: ±2.0dB  
 15 - 20dB: ±1.0dB 10 - 20dB: ±1.0dB  
 20 - 25dB: ±1.5dB 20 - 30dB: ±1.5dB  
 25 - 30dB: ±2.0dB
- 518 ..... 5-18 GHz FREQUENCY RANGE

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	04/20/04	



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

## AMERICAN MICROWAVE CORPORATION

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



APPROVALS		DATE	TITLE			REV.
DRAWN	EGE	04/20/04	PRODUCT FEATURE AGTN-2018-60DD-100 OPTION: 518, A06			
REDRAWN	GDJ	8/6/04	5-18 GHz, PROGRAMMABLE VARIABLE ATTENUATOR			
ISSUED	DA	8/6/04	SIZE	FSCM NO.	DWG NO.	
			A	60483	100-6855	-
			SCALE	N:S	SHEET	1 OF 3

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