

## DESCRIPTION

AMC MODEL AGH-8018-60DD-SF IS A HIGH SPEED OVER-OCTAVE BAND VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 8 BIT BINARY LOGIC OR DRIVEN BY AN ANALOG POSITIVE VOLTAGE; UNIT IS PACKAGED IN A MINIATURE HERMETIC HOUSING FOR HIGH RELIABILITY APPLICATIONS.

## SPECIFICATIONS

- FREQUENCY RANGE ..... 6-18 GHz MINIMUM
- INSERTION LOSS ..... 3.0 dB MAXIMUM
- ATTENUATION FLATNESS ( $\pm$ dB MAXIMUM)

FREQUENCY RANGE	10dB	20dB	40dB	60dB
8.0-18 GHz	0.7	1.0	1.5	1.6
6.0-18 GHz	0.9	1.5	3.0	3.5

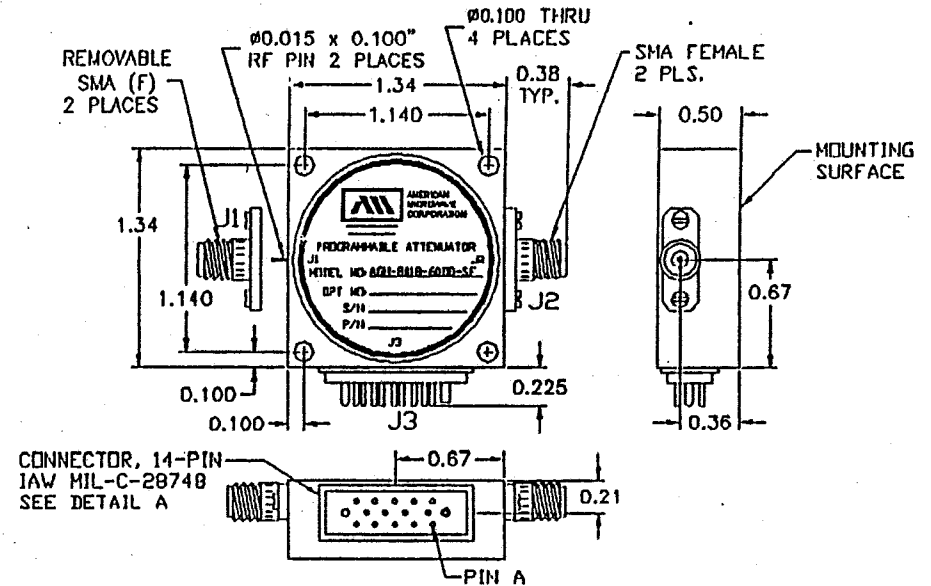
- ATTENUATION ACCURACY ..... 0-30dB  $\pm$ 0.5dB MAXIMUM  
30-50dB  $\pm$ 1.0dB MAXIMUM  
50-60dB  $\pm$ 1.5dB MAXIMUM
- MONOTONICITY ..... GUARANTEED
- TEMPERATURE COEFFICIENT .....  $\pm$ 0.02 dB/ $^{\circ}$ C
- SWITCHING TIME  
(-SF) ..... 500 nS MAXIMUM  
(-VF) ..... 200 nS MAXIMUM  
(-UF) ..... 125 nS MAXIMUM
- VSWR (ALL ATTENUATION LEVELS) ..... 1.8:1 MAXIMUM
- POWER RATINGS  
(-SF) ..... +20dBm CW OR PEAK  
(-VF) & (-UF) ..... +10dBm CW OR PEAK
- CONTROL  
DIGITAL ..... 8 BIT TRUE BINARY LOGIC, 0.25dB MINIMUM ATTENUATION STEP.  
ANALOG ..... 0-6V ANALOG VOLTAGE, 10dB/VOLT TRANSFER FUNCTION
- POWER SUPPLY ..... +12 TO +18VDC @ 100 mA MAXIMUM  
-12 TO -18VDC @ 15 mA MAXIMUM
- CONNECTORS  
RF INPUT/OUTPUT ..... FIELD REPLACEABLE SMA (FEMALE)  
POWER & CONTROLS ..... MINIATURE 14 PIN MALE (MIL-C-28748)  
MATING CONNECTOR (FEMALE) FURNISHED
- SIZE ..... 1.34" x 1.34" x 0.50"

## AVAILABLE OPTIONS

- A01 ..... J1 SMA MALE, J2 SMA FEMALE
- A02 ..... TWO SMA MALE CONNECTORS
- A03 ..... HERMETIC SEALING (MIL-STD-883)

REV.		DESCRIPTION	DATE	APPROVED
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/14/92	

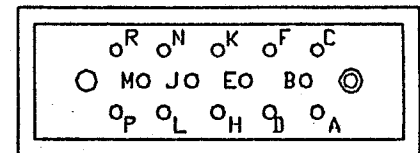
## MECHANICAL OUTLINE



### NOTES:

- 1) DIMENSIONS ARE IN INCHES [MILLIMETERS]
- 2) TOLERANCES: X.XX  $\pm$ 0.020  
X.XXX  $\pm$ 0.010
- 3) WEIGHT: APPROX. 2.4 OZ

### DETAIL A



## ENVIRONMENTAL RATINGS

- TEMPERATURE ..... -55 $^{\circ}$ C TO +110 $^{\circ}$ C (OPERATING)  
-65 $^{\circ}$ C TO +125 $^{\circ}$ 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



AMERICAN MICROWAVE CORPORATION  
7311G GROVE RD., FREDERICK, MD. 21701  
TEL: (301) 662-4700 FAX: (301) 662-4938

APPROVALS	DATE
WJP	11/14/92
K-M	10/14/92

PRODUCT FEATURE		SF (STANDARD)
AGH-8018-60DD-SF		VF (VERY FAST)
HIGH SPEED, 6-18 GHz, PIN DIODE, VARIABLE ATTENUATOR		UF (ULTRA FAST)
SIZE A	SHEET 1 OF 2	DWG. # 100-2813