

## DESCRIPTION:

AMC MODEL AGHPF-1F-32DD-DF32TR IS A DIGITALLY CONTROLLED ANALOG PHASE FREE, OCTAVE BAND VARIABLE ATTENUATOR / MODULATOR, CONTROLLED BY 8 BIT BINARY LOGIC AND OPTIMIZED FOR 0.95 TO 1.25 GHz OPERATION.

## SPECIFICATIONS:

- FREQUENCY RANGE: 0.95 – 1.25 GHz
- INSERTION LOSS: 3.0 dB MAXIMUM
- VSWR: 1.5:1 MAXIMUM
- ATTENUATION DYNAMIC RANGE: 32 dB
- ATTENUATION ACCURACY: 0–20 dB  $\pm 0.8$  dB  
>20–32 dB  $\pm 1.25$ dB
- PHASE SHIFT: 0–20 dB;  $+7^\circ/-13^\circ$   
>20–32 dB;  $+17^\circ/-17^\circ$
- FLATNESS: @ 10dB:  $\pm 0.5$ dB  
@ 20dB:  $\pm 1.0$ dB  
@ 30dB:  $\pm 1.5$ dB
- TEMPERATURE COEFFICIENT:  $\pm 0.3$  dB/ $^\circ$ C
- SWITCHING TIME: 10  $\mu$ S MAXIMUM
- RF POWER RATINGS: 100 mW CW OPERATING  
60 W PEAK OPERATING  
1 W CW SURVIVAL  
100 W PAEK SURVIVAL
- CONTROL: 8-BIT POSITIVE TRUE BINARY
- POWER SUPPLY: +15V DC @ +100mA MAXIMUM
- CONNECTORS:  
RF INPUT/OUTPUT: REMOVABLE SMA FEMALE  
POWER & CONTROLS: MICRO-MINIATURE 15 PIN MALE CONNECTOR  
MATING CONNECTOR FEMALE FURNISHED
- SIZE: 4.50" x 4.00" x 0.56"

ITT CANNON MDB1-15PSP OR EQUIVALENT  
MATING CONNECTOR MDB1-15SSL OR EQUIVALENT  
SUPPLIED WITH THE UNIT

### J3 PIN FUNCTION

PIN	FUNCTION
1	0.125dB(LSB)
2	0.25dB
3	0.5dB
4	1.0dB
5	2.0dB
6	4.0dB
7	8.0dB
8	16.0dB(MSB)
9	N/C
10	N/C
11	N/C
12	N/C
13	+15V
14	N/C
15	GND

## ENVIRONMENTAL RATINGS:

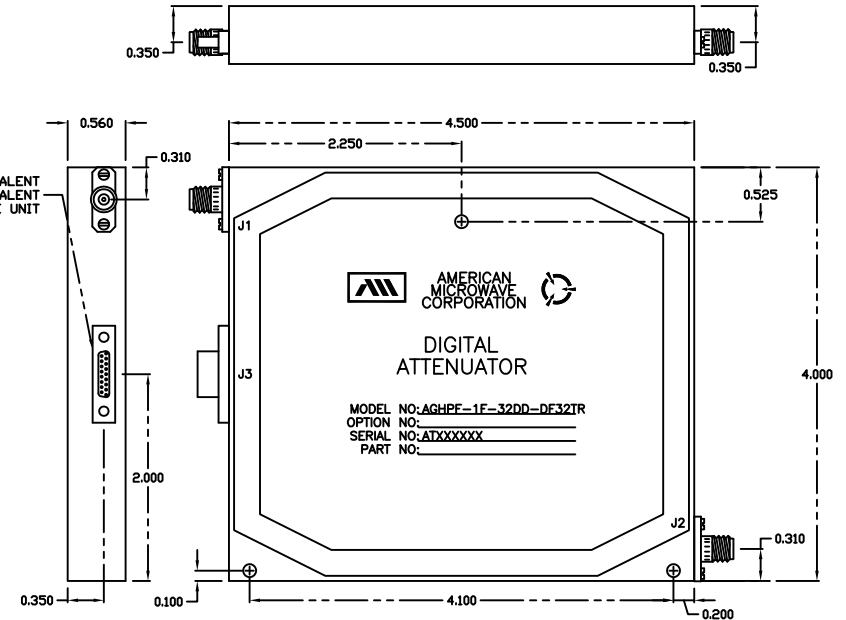
- TEMPERATURE: -40 $^\circ$ C TO +85 $^\circ$ C (OPERATING)  
-65 $^\circ$ C TO +125 $^\circ$ C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

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

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB #212223E-1	03/27/03	
	A	SEE ECN# 13-005	1/24/13	RA

## MECHANICAL OUTLINE:



ALL DIMENSIONS ARE IN INCHES [MM]  
TOLERANCES:  
X.XX  $\pm 0.020$   
X.XXX  $\pm 0.010$

## CONFIDENTIAL AND PROPRIETARY

PART NO.		APPROVALS		DATE	TITLE	
		DRAWN		03/27/03	PRODUCT FEATURE	
		ENG		1/24/13	AGHPF-1F-32DD-DF32TR	
		QAE		1/24/13	DIGITALLY VARIABLE ATTENUATORS	
SIZE	FSCM NO.	DWG NO.		REV.		
A	60483	100-6492		A		
SCALE N:S				SHEET 1 of 3		



AMERICAN MICROWAVE CORPORATION  
FREDERICK, MARYLAND