

## DESCRIPTION

AMC MODEL DVAT-0518-60-8-SK-193 IS A 0.5 TO 18 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL OR OPTIONAL ANALOG VOLTAGE CONTROL.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 0.5 TO 18 GHz
- INSERTION LOSS: ..... 4.0 dB MAXIMUM
- ATTENUATION FLATNESS: .....
  - ⊙ 10 dB = ± 1.0 dB
  - ⊙ 20 dB = ± 1.5 dB
  - ⊙ 40 dB = ± 3.0 dB
  - ⊙ 60 dB = ± 5.0 dB
- ATTENUATION ACCURACY: .....
  - 0-30 dB = ± 1.0 dB
  - >30-50 dB = ± 1.3 dB
  - >50-60 dB = ± 1.5 dB
- MONOTONICITY: ..... GUARANTEED
- TEMPERATURE VARIATION: .....
  - ± 2.5dB -10 to 85 deg C Typ
  - ± 3.5dB -40 to 95 deg C Typ
- SWITCHING TIME: ..... 5 micro sec MAXIMUM
- SMALL SIGNAL BANDWIDTH: ..... 100 kHz Typ ( 6dB with ±3 dB sinewave )
- LARGE SIGNAL BANDWIDTH: ..... 50 kHz Typ ( 30dB with ±30 dB sinewave )
- RETURN LOSS: ..... -12 dB TYP -8.5 dB MAX
- POWER RATING: ..... +20 dBm (see note 1)
- DIGITAL CONTROL: ..... 8 BIT TTL
  - 0.25 dB MINIMUM ATTENUATION STEP
- ANALOG CONTROL option: ..... 0-6V ANALOG VOLTAGE, 10dB/VOLT
- POWER SUPPLY: ..... +12V @ 150 mA MAXIMUM
- CONNECTORS
- RF INPUT/OUTPUT: ..... FIELD REPLACEABLE SMA (FEMALE)
- POWER AND CONTROLS: ..... 15 PIN MICRO-D FEMALE MATING CONNECTOR (MALE) FURNISHED
- SIZE: ..... 2.00" x 1.81" x 0.50"

### OPTIONS:

- A05 ..... +15V POWER SUPPLY

## 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

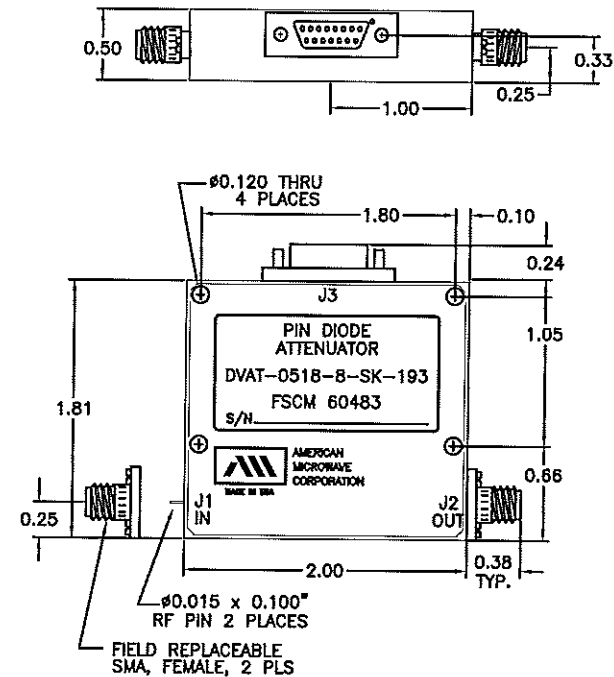
NOTE: THE ABOVE SPECIFICATION ARE SUBJECT TO CHANGE OR REVISION.

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

STANDARD PIN NUMBERING	
PIN	FUNCTION
8	GND
7	Option: Latch En
6	Option: Analog I/P
5	GND
4	0.25 dB (LSB)
3	0.5 dB
2	1 dB
1	2 dB
15	4 dB
14	8 dB
13	16 dB
12	32 dB (MSB)
11	+12VDC
10	Not Used
9	Not Used

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	08/09/07	
	A	SEE ECR# 09-004	1/21/08	
	B	SEE ECR# 09-025	6/9/08	<i>[Signature]</i>



### NOTES

1. Low Frequency reduced power performance refer to test report.
2. Negative supply only for compatibility with previous models.
3. Negative supply may be -V, or Ground or Open Circuit.
4. SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE.
5. SPECIFICATIONS SUBJECT TO CHANGE OR REVISION.

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ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>[Signature]</i>		08/09/07	PRODUCT FEATURE		
CHECKED <i>[Signature]</i>		6/10/09	DVAT-0518-60-8-SK-193		
ISSUED			OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR		
SCALE N:S			SIZE	FSCM NO.	DWG NO.
			A	60483	100-D001-000
					REV. B
SHEET					1 OF 4