

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 = ± 0.9 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 OR +15V @ 150 mA MAXIMUM
- NEGATIVE SUPPLY IS OPTIONAL: ... 0 TO -15V @ 2 mA MAXIMUM (may be omitted)
- 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

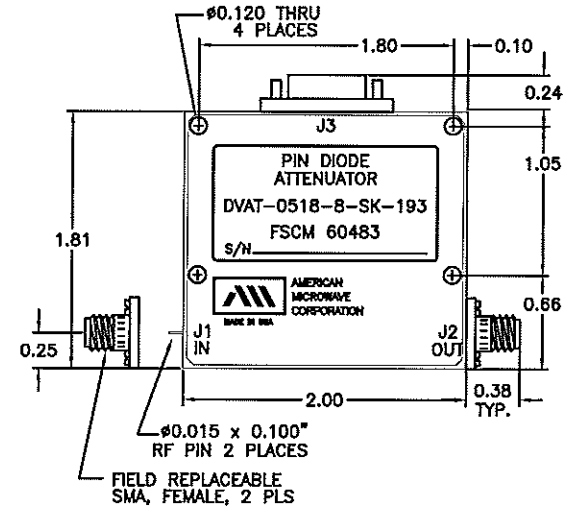
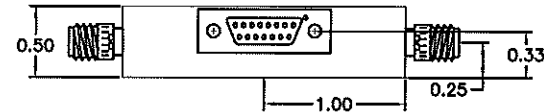
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ENVIRONMENTAL RATINGS

- 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

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	1/21/09	



NOTES

1. Low Frequency reduced power performance refer to test report.
2. Negative supply only for compatability 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.

AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



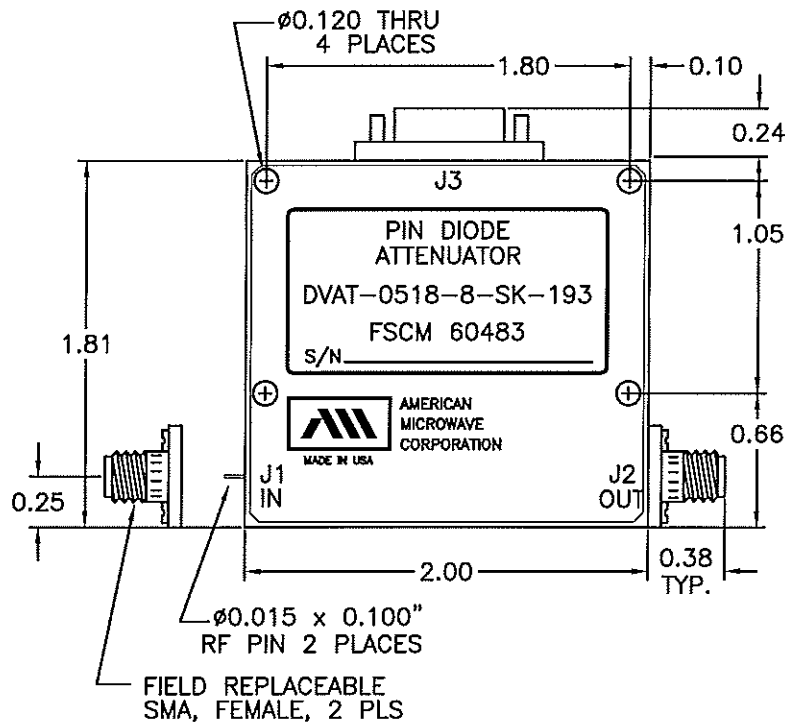
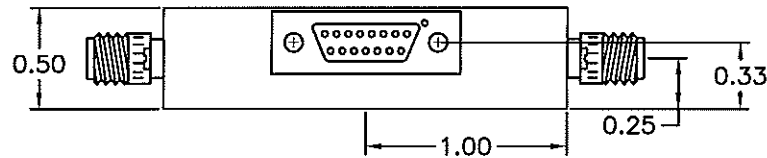
APPROVALS		DATE	TITLE			REV.
DRAWN <i>JK</i>		08/09/07	PRODUCT FEATURE DVAT-0518-60-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			A
CHECKED <i>JK</i>	DATE	2/13/09	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-D001-000	
			SCALE	N:S	SHEET	1 OF 4

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	-	Original Release	08/09/07	
	A	SEE ECR# 09-004	1/21/09	

MECHANICAL OUTLINE



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	+12 to +15V DC
10	-0.0 to -15V DC
9	Not Used

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 X.XXX ± 0.005

APPROVALS		DATE	TITLE			REV.
DRAWN	SK	08/09/07	MECHANICAL OUTLINE DVAT-0518-60-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			A
CHECKED	pt	1/21/09	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-D001-000	
			SCALE	N:S	SHEET	2 OF 4

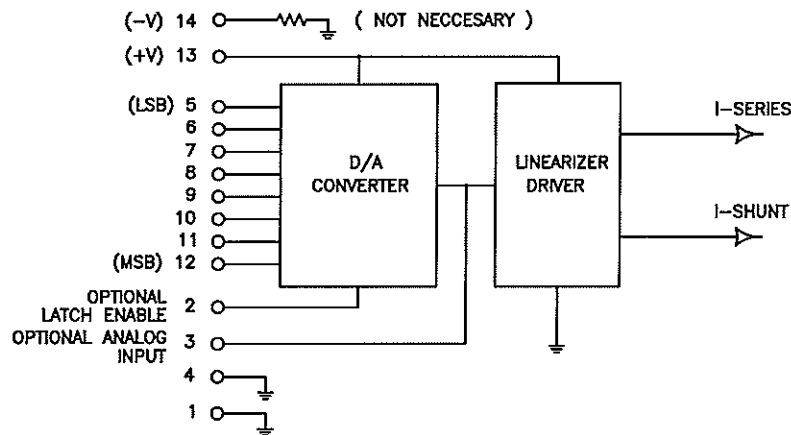
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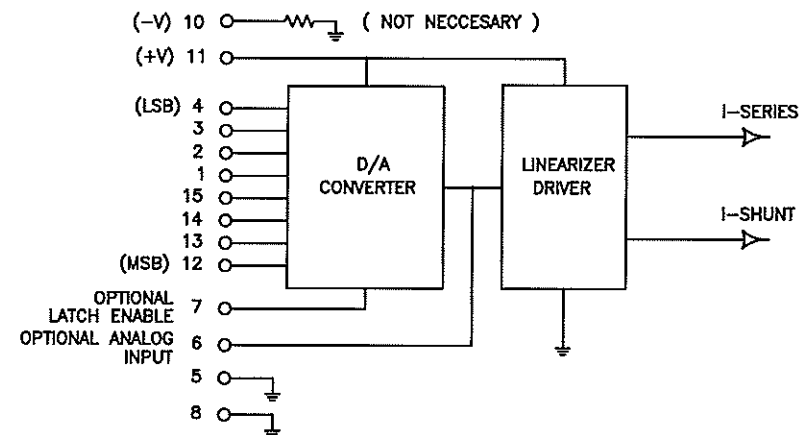
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	08/09/07	
	A	SEE ECR# 09-004	1/21/08	<i>[Signature]</i>

FUNCTIONAL BLOCK DIAGRAM

AMC PIN NUMBERING



STANDARD PIN NUMBERING



CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE			REV.
DRAWN	<i>[Signature]</i>	08/09/07	FUNCTIONAL BLOCK DIAGRAM DVAT-0518-60-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			A
CHECKED	<i>[Signature]</i>	2/26/09	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-D001-000	
			SCALE	N:S	SHEET	3 OF 4