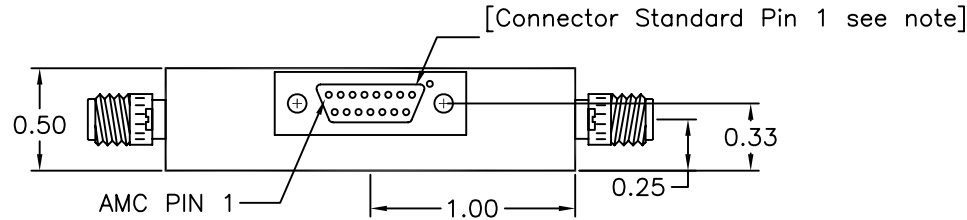


DESCRIPTION

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

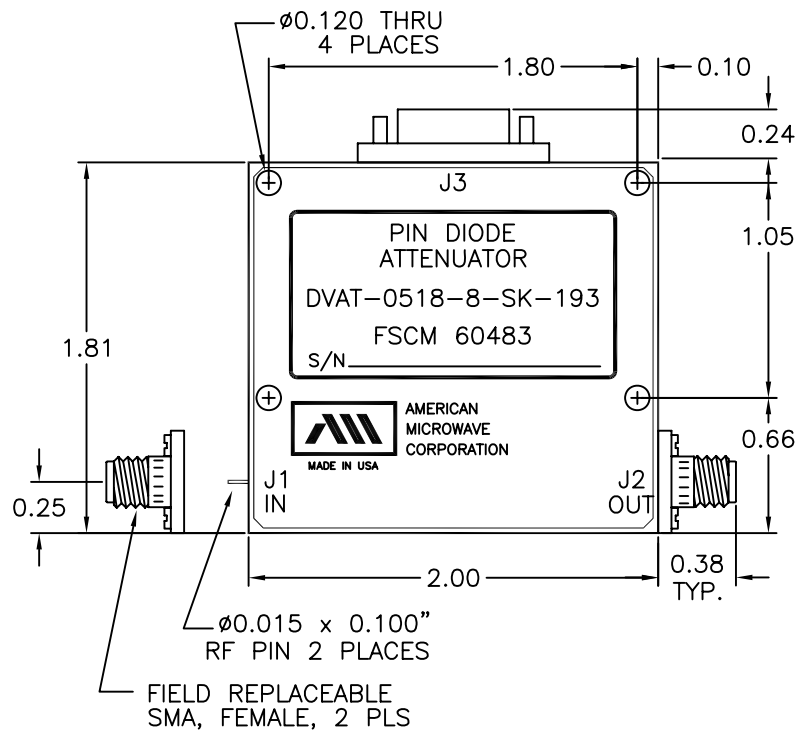
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	06/05/07	

MECHANICAL OUTLINE



AMC PIN NUMBERING	
PIN	FUNCTION
1	GND
2	Option: Latch En
3	Option: Analog I/P
4	GND
5	0.25 dB (LSB)
6	0.5 dB
7	1 dB
8	2 dB
9	4 dB
10	8 dB
11	16 dB
12	32 dB (MSB)
13	+12 to +15V DC
14	-0.0 to -15V DC
15	Not Used

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



NOTE
AMC historical pin numbering not according to standard connector manufacturers pin numbering. (Mirrored) See drawing for identification of pin 1.

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

AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN <i>JK</i>		06/05/07	MECHANICAL OUTLINE DVAT-0518-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			-
CHECKED			SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-D001-000	
			SCALE	N:S		SHEET 2 OF 4

DESCRIPTION

AMC MODEL DVAT-0518-8-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 TO +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"

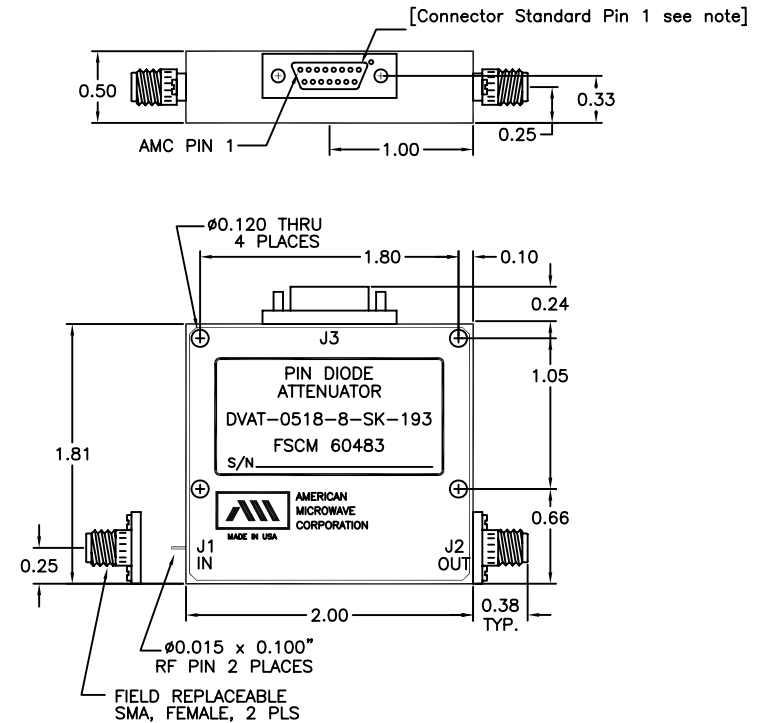
OPTIONS

- - -

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	06/05/07	



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. AMC pin numbering not according to standard connector pin numbering. (Mirrored) Check AMC and standard pin numbering
5. SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE.
6. SPECIFICATIONS SUBJECT TO CHANGE OR REVISION.

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APPROVALS		DATE	TITLE			
DRAWN <i>JX</i>		06/05/07	PRODUCT FEATURE DVAT-0518-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-D001-000	-
			SCALE	N:S		SHEET 1 OF 4

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

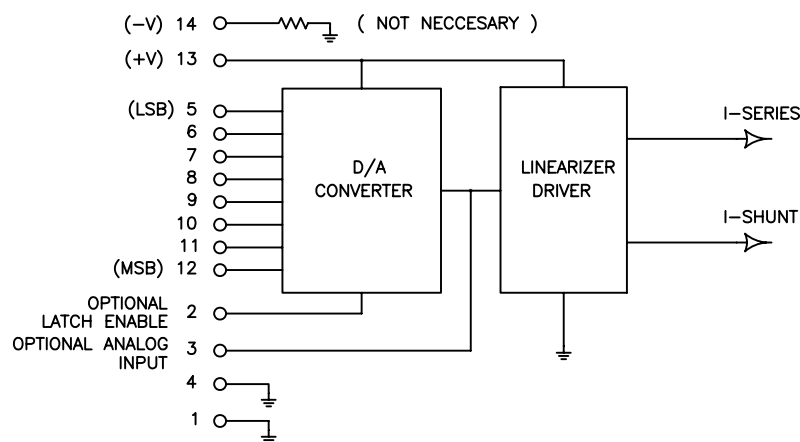
DESCRIPTION

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

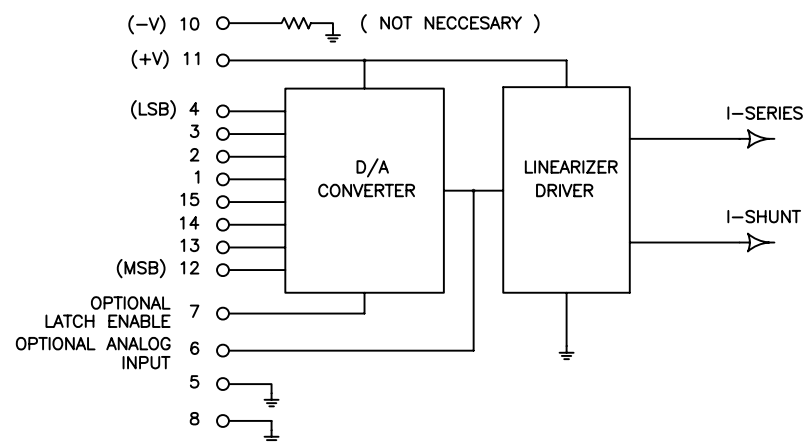
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	06/05/07	

FUNCTIONAL BLOCK DIAGRAM

AMC PIN NUMBERING



STANDARD PIN NUMBERING



NOTE
AMC historical pin numbering not according to standard connector manufacturers pin numbering. (Mirrored) See drawing for identification of pin 1.

CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE			
DRAWN <i>JK</i>		06/05/07	FUNCTIONAL BLOCK DIAGRAM DVAT-0518-8-SK-193 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-D001-000	-
			SCALE	N:S		SHEET 3 OF 4