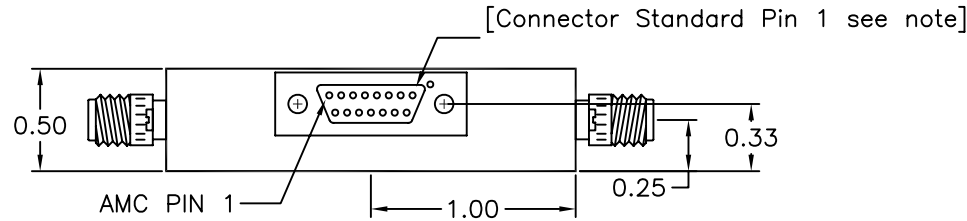


DESCRIPTION

AMC MODEL DVAT-0518-8-SK-196 IS A 0.5 TO 18 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL OR OPTIONAL ANALOG VOLTAGE CONTROL.

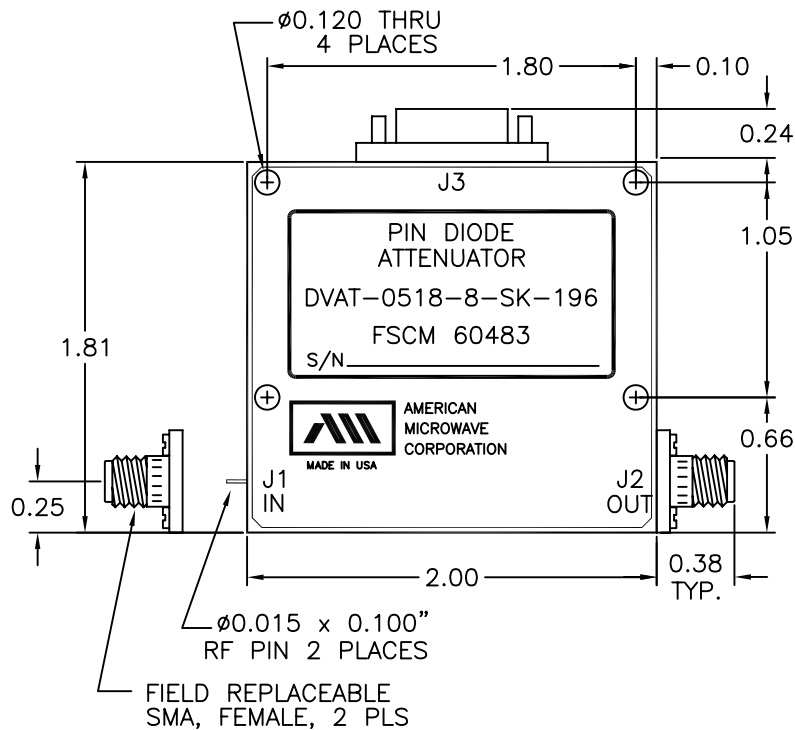
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	07/18/07	

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.

AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED



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

APPROVALS		DATE	TITLE			
DRAWN <i>JK</i>		07/18/07	MECHANICAL OUTLINE DVAT-0518-8-SK-196 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-D001-001	-
			SCALE	N:S		SHEET 2 OF 4

DESCRIPTION

AMC MODEL DVAT-0518-8-SK-196 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: 1.5 micro sec MAXIMUM
- SMALL SIGNAL BANDWIDTH: 150 kHz Typ (6dB with ±3 dB sinewave)
- LARGE SIGNAL BANDWIDTH: 75 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

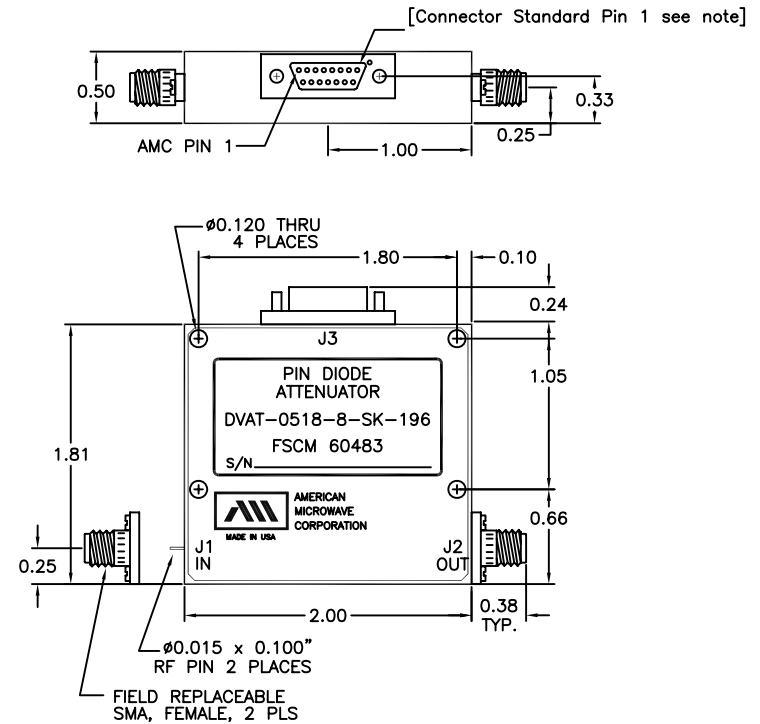
- - -

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

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	07/18/07	



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.

AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JK</i>		07/18/07	PRODUCT FEATURE DVAT-0518-8-SK-196 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			
CHECKED			SIZE A	FSCM NO. 60483	DWG NO. 100-D001-001	REV. -
ISSUED			SCALE N:S	SHEET 1 OF 4		

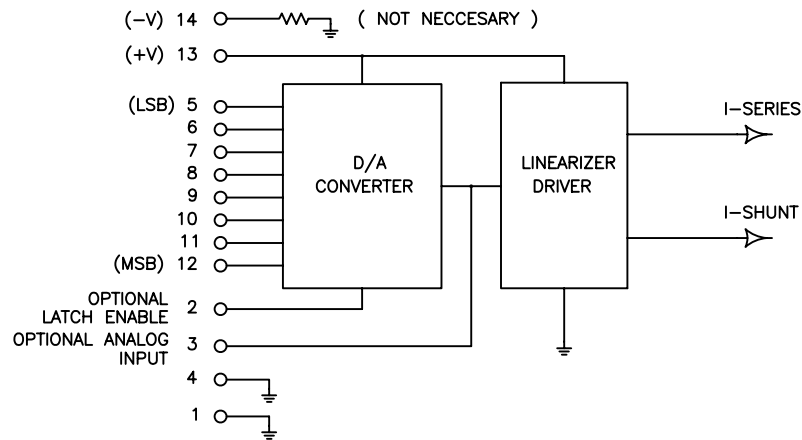
DESCRIPTION

AMC MODEL DVAT-0518-8-SK-196 IS A 0.5 TO 18 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL OR OPTIONAL ANALOG VOLTAGE CONTROL.

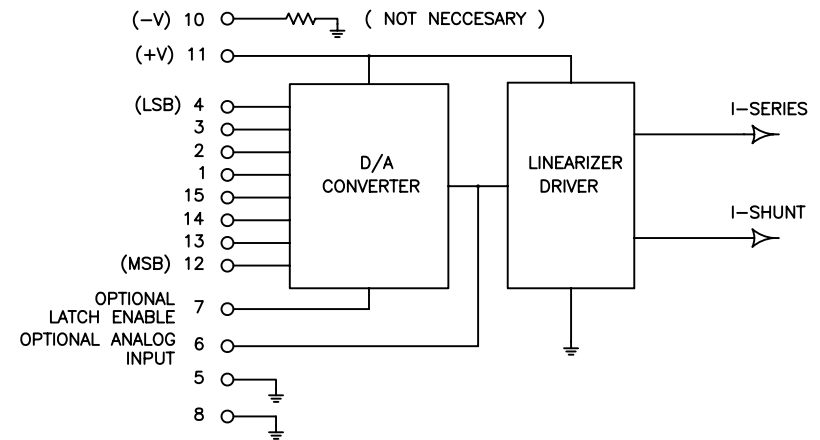
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	Original Release	07/18/07	

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

AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JK</i>		07/18/07	FUNCTIONAL BLOCK DIAGRAM DVAT-0518-8-SK-196 OPTION: 0.5-18 GHz, VARIABLE ATTENUATOR			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-D001-001	-
			SCALE	N:S		SHEET 3 OF 4