

## DESCRIPTION

PMI MODEL DVAT-0518-60-8-SK-193 IS A 0.5 TO 18.0 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL OR OPTIONAL ANALOG VOLTAGE CONTROL.

## SPECIFICATIONS

- FREQUENCY RANGE: \_\_\_\_\_ 0.5 to 18.0 GHz
- INSERTION LOSS: \_\_\_\_\_ 5.25dB 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 μs 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
- 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"
- FINISH: \_\_\_\_\_ PAINTED BLUE

## ENVIRONMENTAL RATINGS

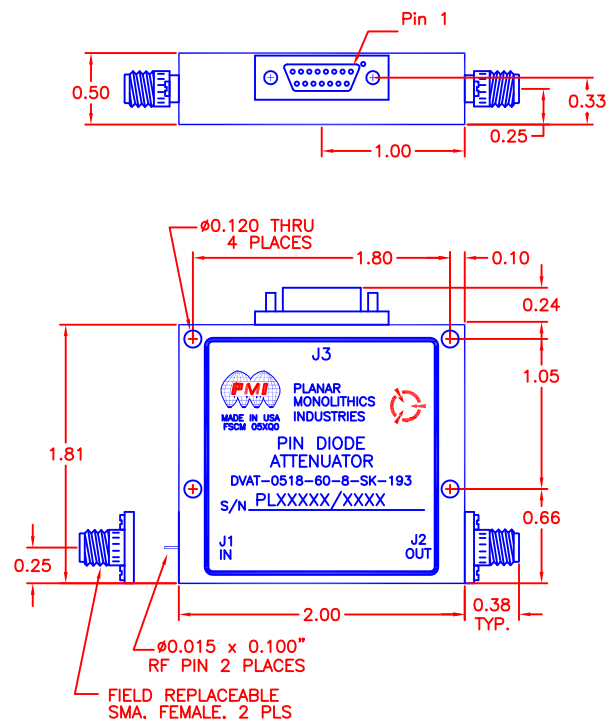
- TEMPERATURE: \_\_\_\_\_ -40°C TO + 85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: \_\_\_\_\_ MIL-STD-202F, METHOD 103B COND. B
- SHOCK: \_\_\_\_\_ MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: \_\_\_\_\_ MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: \_\_\_\_\_ MIL-STD-202F, METHOD 105C COND.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

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

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	4/26/18	

## MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

## PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED

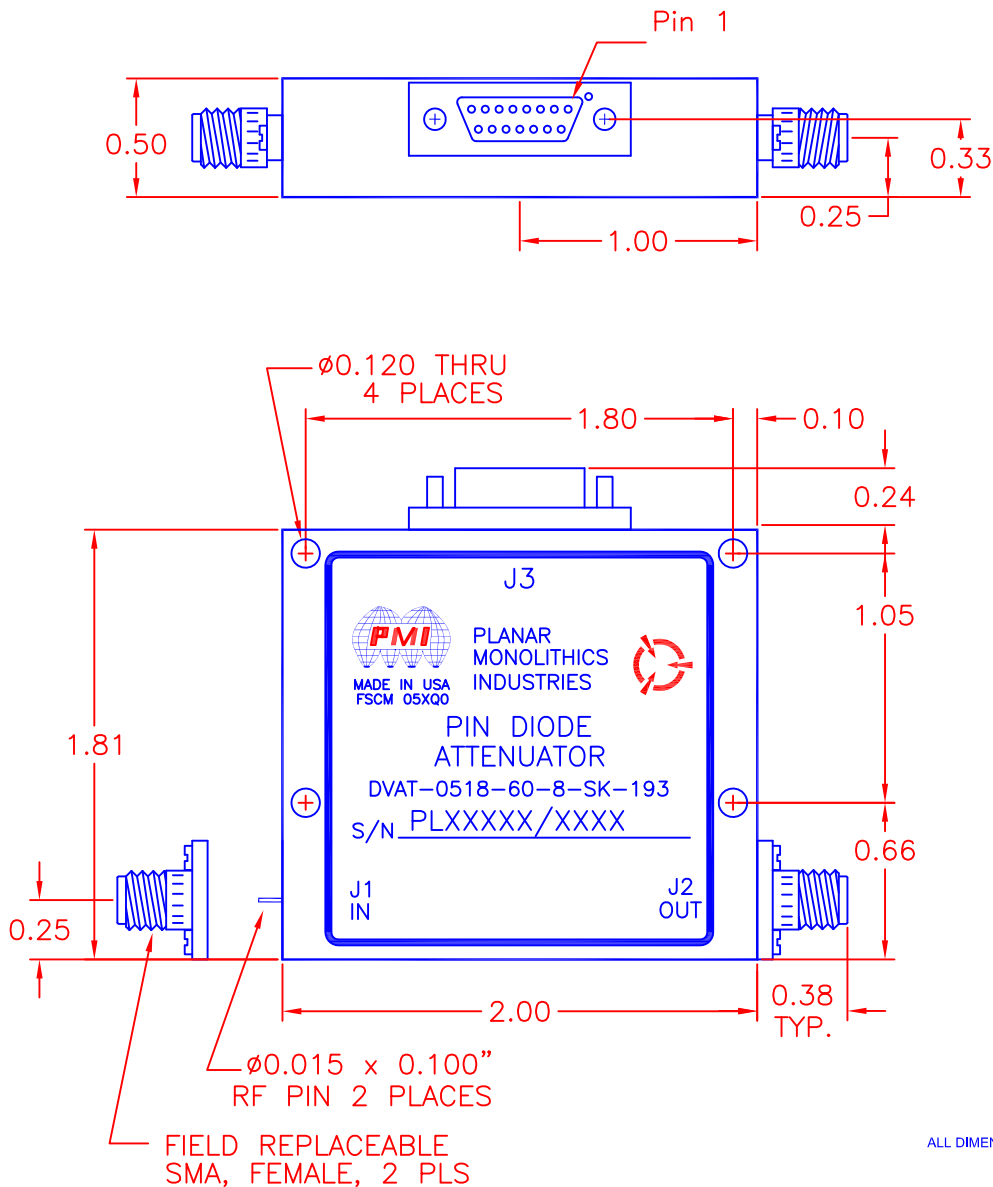


APPROVALS		DATE	TITLE			
DRAWN <i>JGS</i>		2/17/12	PRODUCT FEATURE			
REDRAWN <i>EW</i>		3/19/18	DVAT-0518-60-8-SK-193			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	27035041	A1
			SCALE	SHEET		
			N:S	1 OF 2		

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8 BIT TRUE BINARY LOGIC		
J3 PIN FUNCTIONS		
PIN NO.	FUNCTIONS.	ATNT1 PIN
1	2.0 dB	CP105
2	1.0 dB	CP106
3	0.5 dB	CP107
4	0.25 dB	CP108
5	GND	CP303
6	N/C	CP109
7	N/C	CP100
8	SPARE	CP110
9	NC	CP111
10	-V	CP301
11	+V	CP300
12	32.0 dB	CP101
13	16.0 dB	CP102
14	8.0 dB	CP103
15	4.0 dB	CP104

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