

## DESCRIPTION

PMI MODEL PDVAT-0518-60-8-93-10M18 IS A 10 MHz TO 18 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL OR OPTIONAL ANALOG VOLTAGE CONTROL.

## SPECIFICATIONS

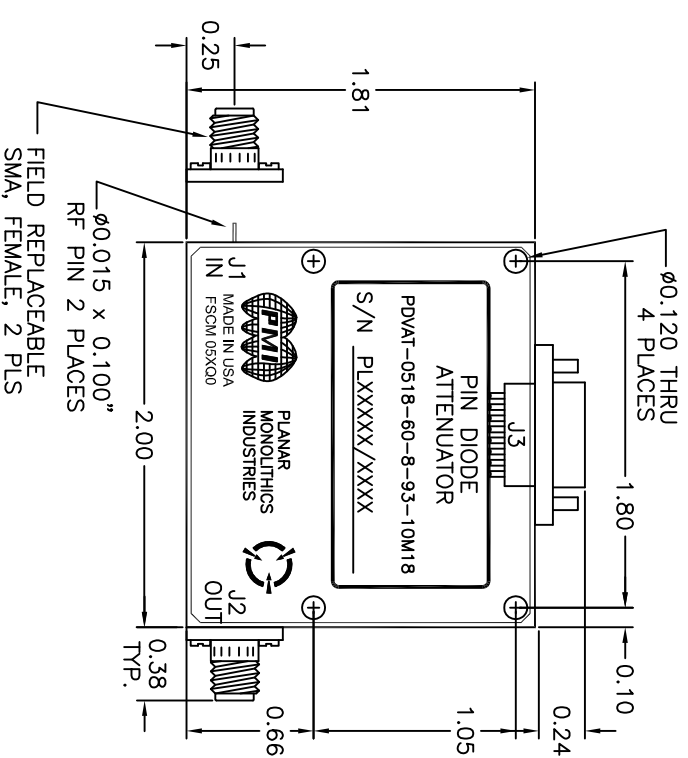
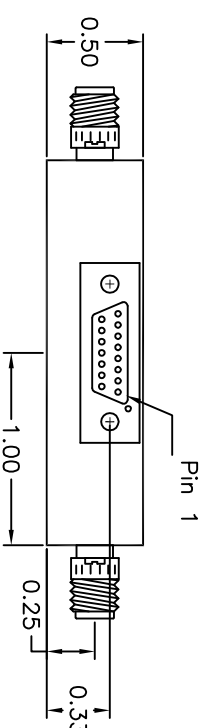
- FREQUENCY RANGE: 10MHz TO 18GHz
- INSERTION LOSS: 4.0 dB MAXIMUM
- ATTENUATION FLATNESS:
  - @ 10 dB = ± 0.9 dB
  - @ 20 dB = ± 1.5 dB
  - @ 40 dB = ± 3.0 dB
  - @ 60 dB = ± 5.0 dB
- ATTENUATION ACCURACY:
  - 0-30 dB = ± 1.0 dB
  - 30-50 dB = ± 1.3 dB
  - 50-60 dB = ± 1.5 dB
- MONOTONICITY: GUARANTEED
- TEMPERATURE VARIATION:
  - ± 2.5dB -10 to 85°C Typ
  - ± 3.5dB -40 to 95°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
- ANALOG CONTROL option: 0.25 dB MINIMUM ATTENUATION STEP
- POWER SUPPLY: 0-6V ANALOG VOLTAGE, 10dB/VOLT
- CONNECTORS: +12V TO +15V @ 150 mA MAXIMUM
- RF INPUT/OUTPUT: FIELD REPLACEABLE SMA (FEMALE)
- POWER AND CONTROLS: 15 PIN MICRO-D FEMALE
- SIZE: MATING CONNECTOR (MALE) FURNISHED  
2.00" x 1.81" x 0.50"

NOTE 1. Reduced power performance at low frequencies.

## 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
-	-	OUTLINE DRAWING	2/17/12	KLL



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 ISO 9001:2008 CERTIFIED



TITLE: MECHANICAL OUTLINE

PDVAT-0518-60-8-93-10M18

10 MHz-18 GHz, VARIABLE ATTENUATOR

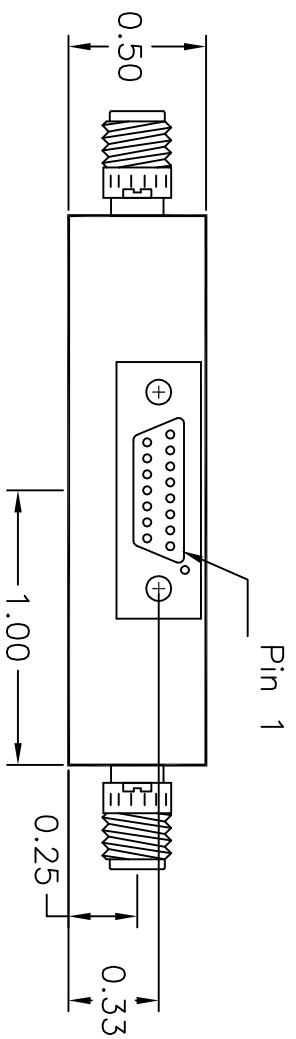
APPROVALS	DATE	TITLE	SIZE	FSCM NO.	DWG NO.	REV.
ZIR	02/17/12	MECHANICAL OUTLINE	A	05X00	PRELIM	-
CHECKED						
ISSUED						

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

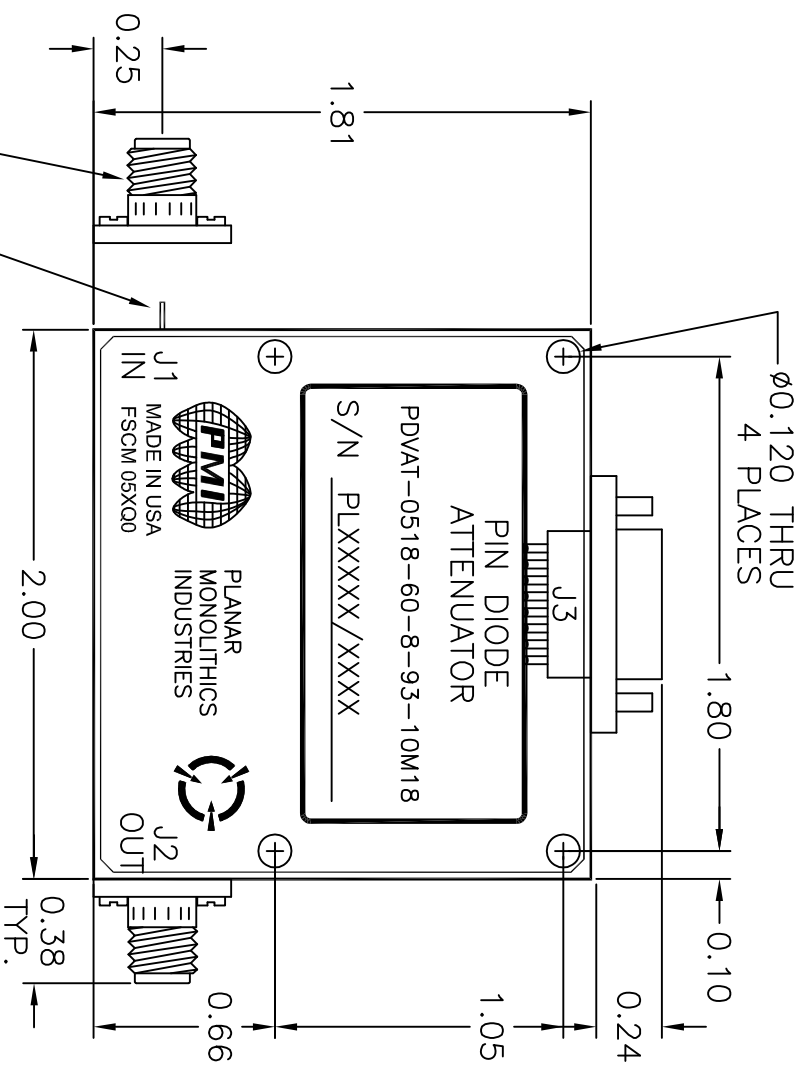
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**MECHANICAL OUTLINE**



PIN NUMBERING	PIN	FUNCTION
1	2dB	
2	1dB	
3	0.5dB	
4	0.25dB (LSB)	
5	GND	
6	Not Used	
7	Not Used	
8	GND	
9	Not Used	
10	Not Used	
11	+VDC	
12	32dB (MSB)	
13	16dB	
14	8dB	
15	4dB	



FIELD REPLACEABLE SMA, FEMALE, 2 PLS  
RF PIN 2 PLACES  
Ø0.015 x 0.100"

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

REVISIONS			DATE	APPROVED
ZONE	REV.	DESCRIPTION		
-	-	OUTLINE DRAWING	2/17/12	XCL

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**PMI**

APPROVALS	DATE	TITLE
ZIR	02/17/12	MECHANICAL OUTLINE

PDVAT-0518-60-8-93-10M18  
10 MHz-18 GHz, VARIABLE ATTENUATOR

DRAWN	CHECKED	ISSUED	SCALE	N:S	SHEET	2 OF 2
ZIR			A	05X00		

SIZE FSCM NO. DWG NO. PRELIM REV. -