

## DESCRIPTION

PMI MODEL SDLVA-218-44-70MV IS A 44 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 2GHz TO 18GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

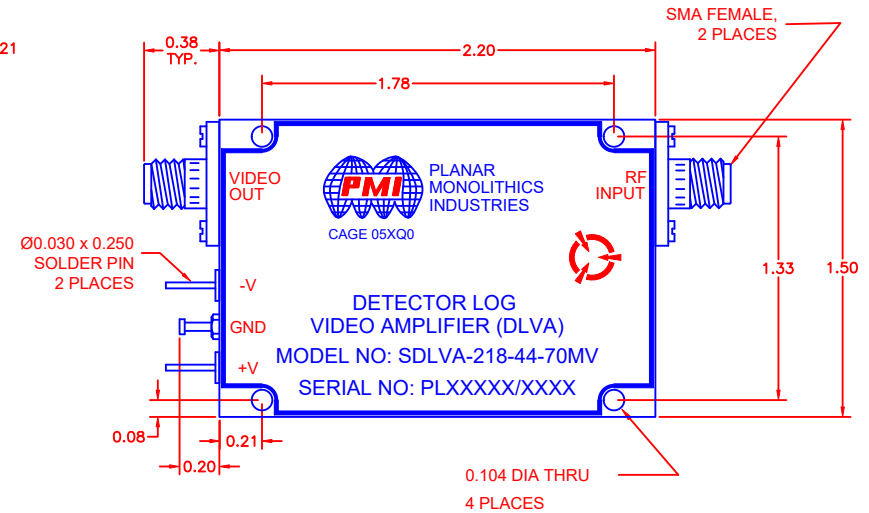
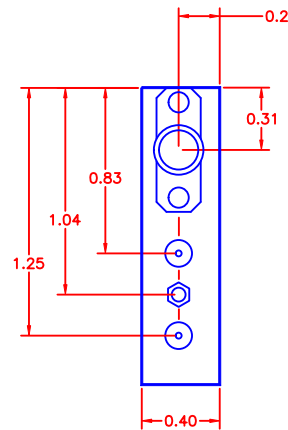
## SPECIFICATIONS

- FREQUENCY RANGE: ..... 2GHz TO 18GHz
- TSS: ..... -42 dBm MAXIMUM
- DYNAMIC RANGE: ..... -40 TO +4 dBm MINIMUM
- FLATNESS: ..... ± 1.5 dB MAXIMUM
- LOG LINEARITY AT 25°C: ..... ± 0.75 dB MAXIMUM (-40 TO 0 dBm)
- LOG SLOPE: ..... 70 ±3 mV/dB MAXIMUM
- DC OFFSET AT RF TERMINATED: ..... ± 70 Mv MAXIMUM
- RISE TIME: ..... 25 ns MAXIMUM
- RECOVERY TIME: ..... 500 ns MAXIMUM
- NOISE AT RF TERMINATED: ..... 150 mV (VP-P MAXIMUM)
- FALL TIME: ..... 300 ns MAXIMUM
- OUTPUT LOAD IMPEDENCE: ..... 50 Ω
- PULSE WIDTH RANGE: ..... 50 ns~CW MINIMUM
- MAX INPUT POWER: ..... +20 dBm
- MODE: ..... DC COUPLED
- DC POWER (NO LOAD)
  - +V: ..... 15V @ 200 mA MAXIMUM
  - V: ..... 15V @ 150 mA MAXIMUM
- SIZE: ..... 2.20" x 1.50" x 0.40"
- FINISH: ..... GOLD PLATED

## ENVIRONMENTAL RATINGS

- TEMPERATURE: ..... 0°C TO + 50°C (OPERATING)  
..... -65°C TO +100°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: 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
	1	ORIGINAL RELEASE	8/14/13	
	A1	ECN # 16-0137	9/28/16	

PMI CONFIDENTIAL AND PROPRIETARY

## PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-5019 FAX: 301-662-1731  
WEBSITE: [www.pmi-rf.com](http://www.pmi-rf.com)  
E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN JGS		8/14/13	PRODUCT FEATURE SDLVA-218-44-70MV		
MODIFIED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	27019601
			REV.	A1	
			SCALE	N:S	SHEET 1 OF 1