

DESCRIPTION:

PMI MODEL NUMBER SDLVA-2G6G-70-50MV IS A SDLVA (SUCCESSIVE DETECTION LOGARITHMIC VIDEO AMPLIFIER) DESIGNED TO OPERATE OVER THE 2 GHz TO 6 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED FOR ULTRA HIGH SPEED APPLICATIONS WHILE MAINTAINING FLATNESS AND ACCURACY.

SPECIFICATIONS:

- FREQUENCY: 2.0 GHz TO 6.0 GHz
- NOISE FIGURE 8 dB MAX@ 25°C, 9dB MAX@ temp.
- INPUT DYNAMIC RANGE -65 TO +5 dBm MIN.
- RF OUTPUT POWER -10 dBm ±3 dB @ -65 dBm input
- RF INPUT POWER MAX +15 dBm
- SMALL SIGNAL GAIN FLATNESS Within +6 dB and -3 dB relative to average gain
- TSS: -70 dBm or better, variation less than ±3 dB over frequency
- VIDEO FLATNESS OVER FREQUENCY: 3.5 dB pk-pk MAX.
- VIDEO POLARITY 3.5 dB pk-pk MAX.
- VSWR: 2.0:1
- LOG SLOPE: 50 mV/±2mV/dB (3.25V ±130mV over the input range)
- VIDEO RESPONSE OVER TEMP < ±5 dB relative to 25°C
- LOG RANGE: -65 to +5 dBm
- LOG LINEARITY: ±75mV From Best Fit Line
- DC OFFSET +75mV Typical, 0 mV to +150mV MAX
- PULSE RANGE: 25 ns to CW
- RISE TIME: 12 ns
- FALL TIME: 20 ns
- RECOVERY TIME: 50 ns to within 1 dB of small signal gain up to 0 dBm
- SETTLING TIME 20 ns to within 1 dB of final value
- OVERSHOOT 1.5 dB MAX
- VIDEO BANDWIDTH 30 MHz MIN
- VIDEO LOAD 50 Ohms
- 1 dB VIDEO COMPRESSION +5 dBm MIN
- WEIGHT 4 ounces MAX
- POWER SUPPLY: +11.5V to +15.5V @ 550 mA MAX (+20V no damage)
-11.5V to -15.5V @ 250 mA MAX (-20V no damage)
- RF / VIDEO CONNECTORS: SMA female per MIL-PRF-39012, Non-exposed captivation holes.
- POWER CONNECTORS Filter Feedthru (1000pf min), 0.030 min dia.
- GROUND Solder Turret, 0.030 min shank dia.

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -10°C TO +75°C (OPERATING)
-40°C TO +85°C (STORAGE)
- HUMIDITY: 100% RELATIVE +30°C TO +55°C with condensation
- SHOCK: MIL-STD-810F, Method 516.5 Procedure 1 (OPERATING)
11 g PEAK, 20 ms HALF SINE
MIL-STD-810F, Method 516.5 Procedure V (NON-OPERATING)
26 g PEAK, 20 ms HALF SINE
- VIBRATION, SINE: MIL-STD-810F, Method 514.5 Procedure 1, 2 Hrs in 3 axes
0.2"(double amplitude) 0.1 - 1Hz, 2g from 1 - 50 Hz
- VIBRATION, RANDOM: MIL-STD-810F, Method 514.5 10 min in 3 axes
0.02 g2 / Hz from 20 Hz to 2,000 Hz
- ALTITUDE: -3,000 FEET TO 30,000 FEET (OPERATING)
-3,000 FEET TO 40,000 FEET (STORAGE)
- SALT FOG: MIL-STD-202F, METHOD 107D COND. A
- FUNGUS: NO FUNGUS NUTRIENT MATERIALS
- ES SCREENING Non-operating thermal shock per MIL-STD 883, Method 1010, test condition B (10 cycles, -55 to +125°C, 30 min dwells with combined pre/post seal DC power burn-in per MIL-STD-1015, test condition B 96 hrs @ 85°C

PMI CONFIDENTIAL & PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001:2008 CERTIFIED



NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

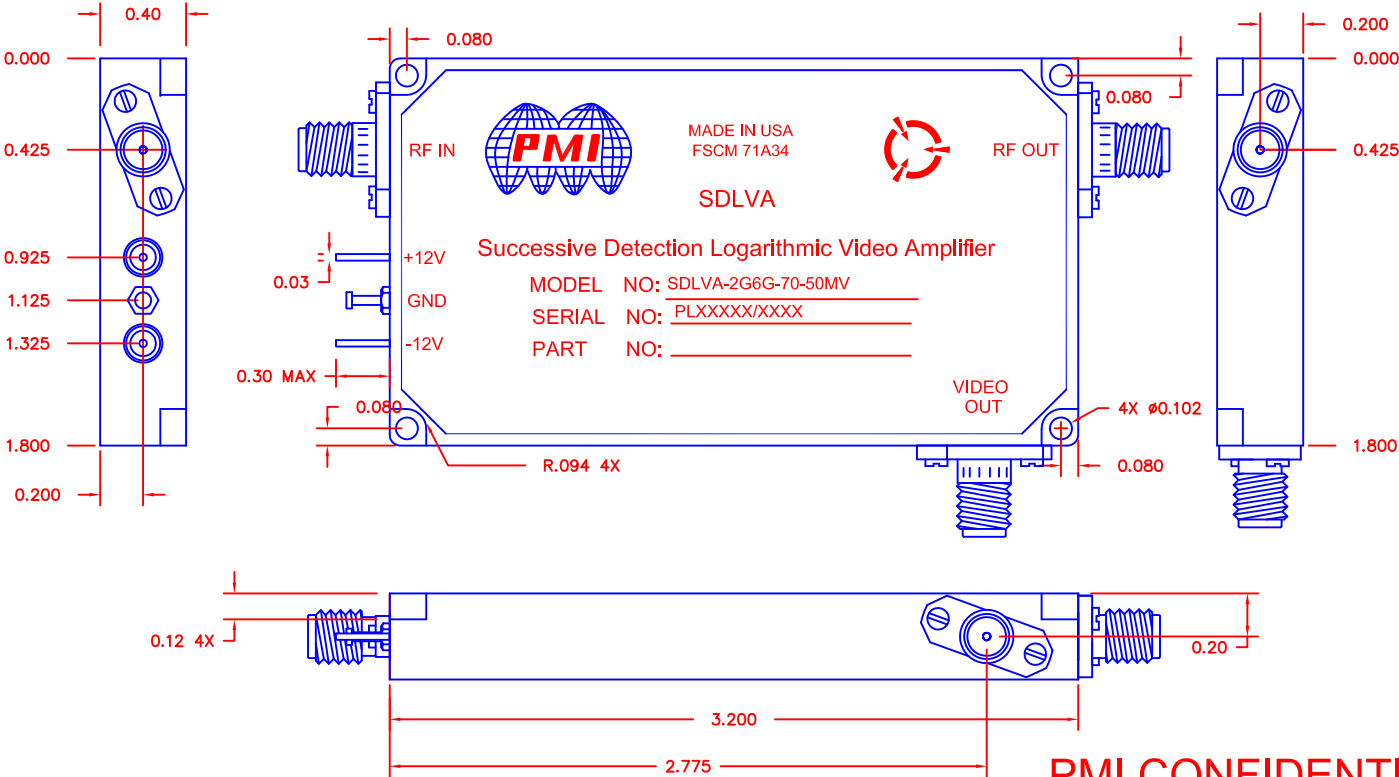
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY		

		TITLE PRODUCT FEATURE SDLVA-2G6G-70-50MV			
APPROVALS	DATE				
DRAWN <i>JM</i>	<i>9-22-16</i>				
CHECKED		SIZE A	FSCM NO. 71A34	DWG NO. PRELIMINARY	REV. —
ISSUED		SCALE N:S		SHEET 1 OF 2	

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MECHANICAL OUTLINE

PLANAR MONOLITHICS INDUSTRIES, INC.

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APPROVALS		DATE	TITLE		PRODUCT FEATURE	
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CHECKED			SIZE	FSCM NO.	OWG NO.	REV.
ISSUED			A	71A34	PRELIMINARY	—
			SCALE	N:S	SHEET	2 OF 2