

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER: SDLVA-3G18G-CW-70-MAH IS A CW-IMMUNE SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER OPERATING IN THE 2-18 GHz FREQUENCY BAND. IT FEATURES A SPST ON THE RF OUTPUT WHICH ALLOWS FOR THE RF TO BE BLANKED WHEN THE RF INPUT SIGNAL IS BELOW THE -64dBm THRESHOLD. IN ADDITION TO RF BLANKING, A 3.3V TTL-COMPATIBLE OUTPUT IS ALSO PROVIDED FOR TIME-GATING OR SAMPLING, TO ASSIST IN DIGITAL SYSTEM INTEGRATION.

SPECIFICATIONS:

- FREQUENCY RANGE: 2-18 GHz
- FREQUENCY FLATNESS: ± 2.0 dB MAX.
- TSS: -68 dBm MIN., -70dBm TYP.
- LIMITED OUTPUT POWER: 6.5 dBm ± 3.0 dB MAX.
- VSWR: 2.0:1 MAX.
- LINEAR OUTPUT GAIN: 43 dB ± 3.0 dB MAX.
- LINEAR OUTPUT Psat: 3 dBm ± 3.0 dB MAX.
- VO (VIDEO COMPARATOR SIGNAL AMPLITUDE): 3.3V TYP.
- VIDEO COMPARATOR DELAY: 50ns TYP.
- VIDEO COMPARATOR THRESHOLD LEVEL: -64dBm ± 3.0 dB MAX.
- V1 (LOG VIDEO SIGNAL AMPLITUDE): 1 VOLT MAX.
- LOG SLOPE: 10mV/dB INTO A 50-OHM LOAD (± 1 mV) MAX.
- LOG RANGE: -65 TO +5 dBm MIN.
- LOG LINEARITY: ± 1.75 dB (-40°C TO +85°C) MAX.
- PULSE RANGE: 100ns TO 250 us
- RISE TIME: 35ns MAX.
- SETTTLING TIME TO ± 1 dB: 50ns TYP.
- RECOVERY TIME: 200ns MAX. (150ns TYP.)
- CW IMMUNITY RANGE: TSS TO -45 dBm (1dB DEGRADATION)
- PULSE CONSIDERED "CW": 1 ms TYP.
- REJECTION TIME: 1 ms TYP.
- DROOP: 1dB MAX.
- SPST ISOLATION: 70 dB TYP.
- SPST SWITCH SPEED: 20ns TYP.
- POWER SUPPLY: ± 12 VDC TO ± 15 VDC.
- DIMENSIONS: 2.30" X 2.20" X 0.36"
- CONNECTORS: SMA FEMALE
- FINISH: GOLD PLATED

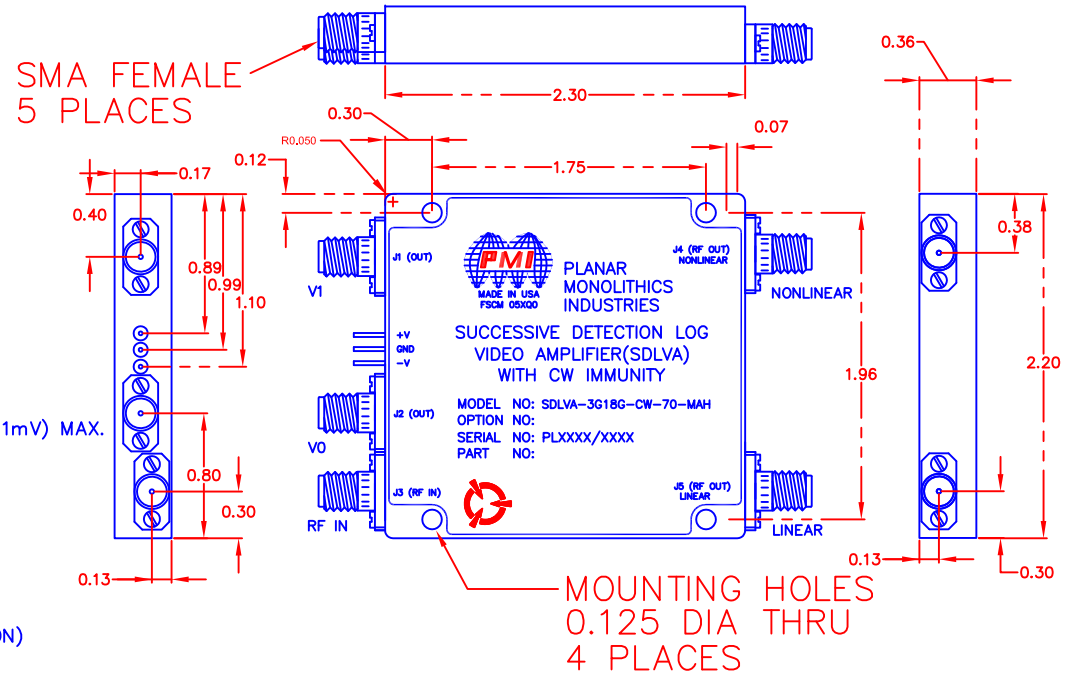
ENVIRONMENTAL RATINGS:

- TEMPERATURE: -40°C TO +85°C (OPERATING)
..... -54°C TO +100°C (STORAGE)
- HUMIDITY: MIL-STD-202G, METHOD 103B COND. B
- SHOCK: MIL-STD-202G, METHOD 213B COND. B
- VIBRATION: MIL-STD-202G, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202G, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202G, 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
	1	ORIGINAL RELEASE	9/11/12	
	A1	ECN # 13-0057	6/06/13	
	A2	ECN # 13-0209	11/25/13	



PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE			
DRAWN PJK		11/14/12	PRODUCT FEATURE SDLVA-3G18G-CW-70-MAH			
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27017562	REV. A2
ISSUED			SCALE N: S		SHEET 1 OF 1	