

## DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER: SDLVA-100M3G-70-MAH IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER OPERATING IN THE 0.1-3 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:	0.1-3 GHz
• FREQUENCY FLATNESS:	±2.0 dB MAX.
• TSS:	-68 dBm MIN., -70dBm TYP.
• LIMITED OUTPUT POWER:	6.5 dBm ±3.0 dB MAX.
• LINEAR OUTPUT GAIN:	38 dB ±3.0 dB MAX.
• LINEAR OUTPUT Psat:	6 dBm ±3.0 dB MAX.
• VSWR:	2.0:1 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 (±1mV) MAX.
• LOG RANGE:	-65 TO +5 dBm MIN.
• LOG LINEARITY:	±1.50dB (-40°C TO +85°C) MAX.
• PULSE RANGE:	100ns TO CW
• RISE TIME:	35ns TYP.
• SETTLING TIME TO ±1dB:	50ns TYP.
• RECOVERY TIME:	200ns MAX. (150ns TYP.)
• 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

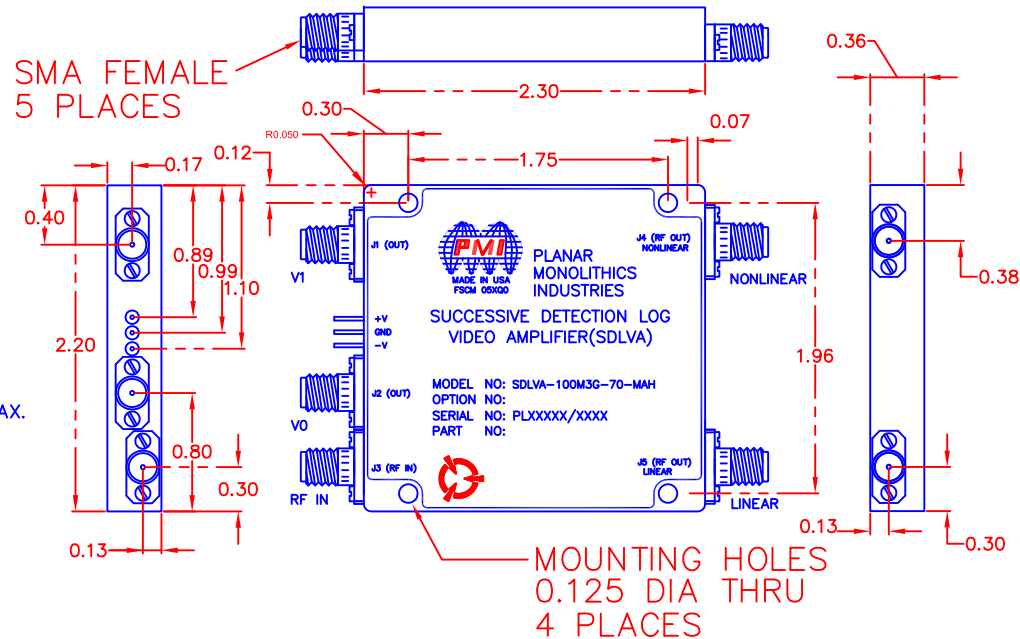
## ENVIRONMENTAL RATINGS:

• 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
	A1	ORIGINAL RELEASE	11/14/12	
	A2	ECN # 13-0130	8/28/13	
	A3	ECN # 13-0210	12/04/13	



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN	PJK	11/14/12	PRODUCT FEATURE SDLVA-100M3G-70-MAH		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	27017542
			SCALE	N: S	SHEET 1 OF 1
			REV.	A3	