

## DESCRIPTION

THE MODEL SDLVA-0R91R3-70-CD-RF IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) WITH A LIMITED IF OUTPUT THAT OPERATES BETWEEN THE 900 TO 1300 MHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70 dB, A LOG SLOPE OF 50 mV/dB, AND A VIDEO BANDWIDTH OF 14 MHz. FURTHERMORE, IT HAS BEEN DESIGNED USING CUTTING EDGE GaAs TECHNOLOGY WHICH PROVIDES STUNNING PERFORMANCE AND RELIABILITY IN A COMPACT PACKAGE MAKING IT AN OPTIMUM SOLUTION FOR HIGH SPEED CHANNELIZED RECEIVER APPLICATIONS.

## SPECIFICATIONS

- FREQUENCY RANGE: .....900MHz TO 1300MHz
- DYNAMIC RANGE: .....-80 TO -5 dBm
- LOG LINEARITY: .....± 1.0 dB Max
- LOG ACCURACY: .....± 1.50 dB Max @25°C
- VSWR INPUT: .....2.0:1 Max
- TANGENTIAL SENSITIVITY: .....-82 dBm Typical
- FREQUENCY FLATNESS .....± 1.25 dB Max @25°C
- LIMITED IF OUTPUT: .....+5 dBm Typical
- MAXIMUM RF INPUT POWER: .....+10 dBm CW
- LOG VIDEO OUTPUT:
  - OUTPUT COUPLING: .....DC
  - RISE TIME: .....25 ns Max
  - FALL TIME: .....200 ns Max
  - RECOVERY TIME .....300 ns Max
  - SETTLING TIME: .....60 ns Max
  - LOG SLOPE: .....50 mV/dB NOMINAL
- VIDEO LOAD: .....50 OHMS
- DC POWER SUPPLY:
  - +V: .....+12V TO +15V
  - V: .....-12V TO -15V

- SIZE: .....(L) 3.75" X (W) 1.50" X (H) 0.50"
- FINISH: .....GOLD PLATED

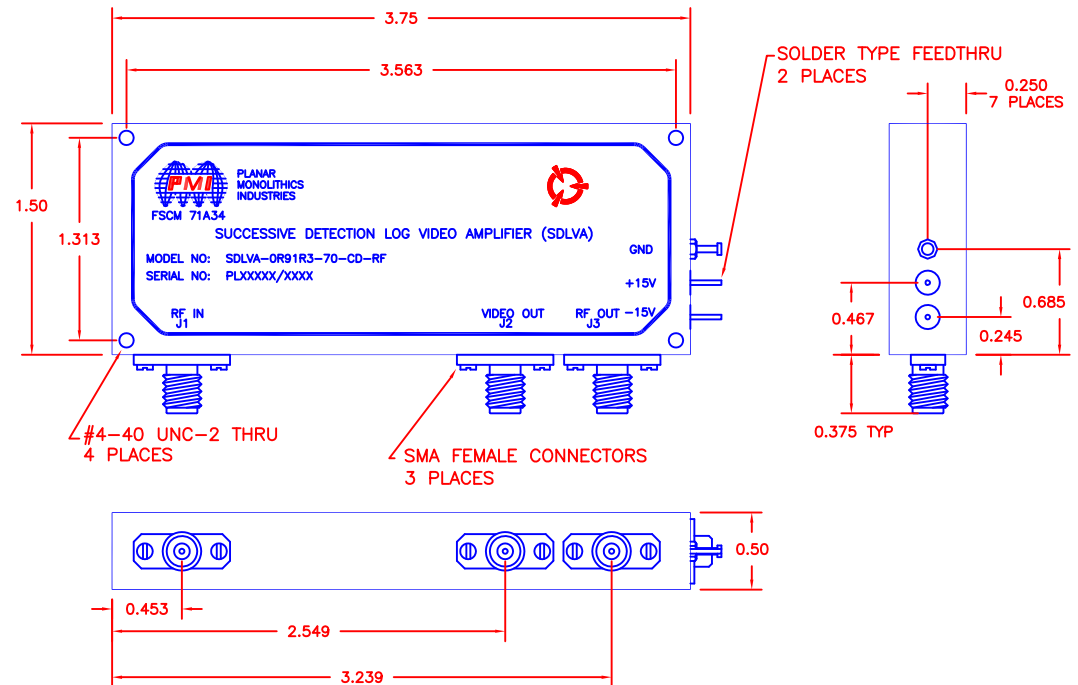
## ENVIRONMENTAL RATINGS

- **TEMPERATURE:** .....-55°C TO +85°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: 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  
WEIGHT: 2.75 oz.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	5-31-17	



## PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001:2008 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JM</i>		5-31-17	PRODUCT FEATURE			
CHECKED			SDLVA-0R91R3-70-CD-RF			
ISSUED			900 TO 1300 MHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER			
SIZE	FSCM NO.	DWG NO.	REV.			
A	71A34	PRELIMINARY	-			
SCALE	N:S	SHEET	1 OF 1			