

DESCRIPTION

THE MODEL SDLVA-2G6G-70-CD-1 IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 2 TO 6 GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70 dB, A LOG SLOPE OF 40 mV / dB, AND A NOMINAL VIDEO BANDWIDTH OF 20 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: 2.00 GHz TO 6.00 GHz
- DYNAMIC RANGE: -65 dBm TO 5 dBm
- LOG LINEARITY: ± 1.75 dB Max
- LOG ACCURACY: + 1.75 dB Max
- FREQUENCY FLATNESS: ± 1.2 dB
- MAX VIDEO OUTPUT: 3.5 Volts
- MAX RF OUTPUT: + 5 dBm
- RF GAIN: 70 dB TYP
- MAX LOGGING RANGE: + 5 dBm
- MIN LOGGING RANGE: - 70 dBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - RISE TIME: 15 ns Typ, 25 ns Max
 - FALL TIME: 25 ns Typ, 30 ns Max
 - DC OFFSET: 0.15 V NOMINAL (ADJUSTABLE)
 - LOG SLOPE: 40 mV/dB NOMINAL
 - LOG SLOPE VARIATION WITH FREQUENCY: ± 1.5 mV/dB TYPICAL
 - LOG SLOPE VARIATION WITH TEMPERATURE: ± 1.2 mV/dB TYPICAL
- VIDEO LOAD: $50\Omega \pm 10\%$
- DC POWER SUPPLY:
 - +V: +12V TO +15V @300 mA TYP
 - V: -12V TO -15V @190 mA TYP

*NOTE: DO NOT SUPPLY +V WITHOUT -V SUPPLIED AS WELL AS THIS MAY DESTROY THE UNIT

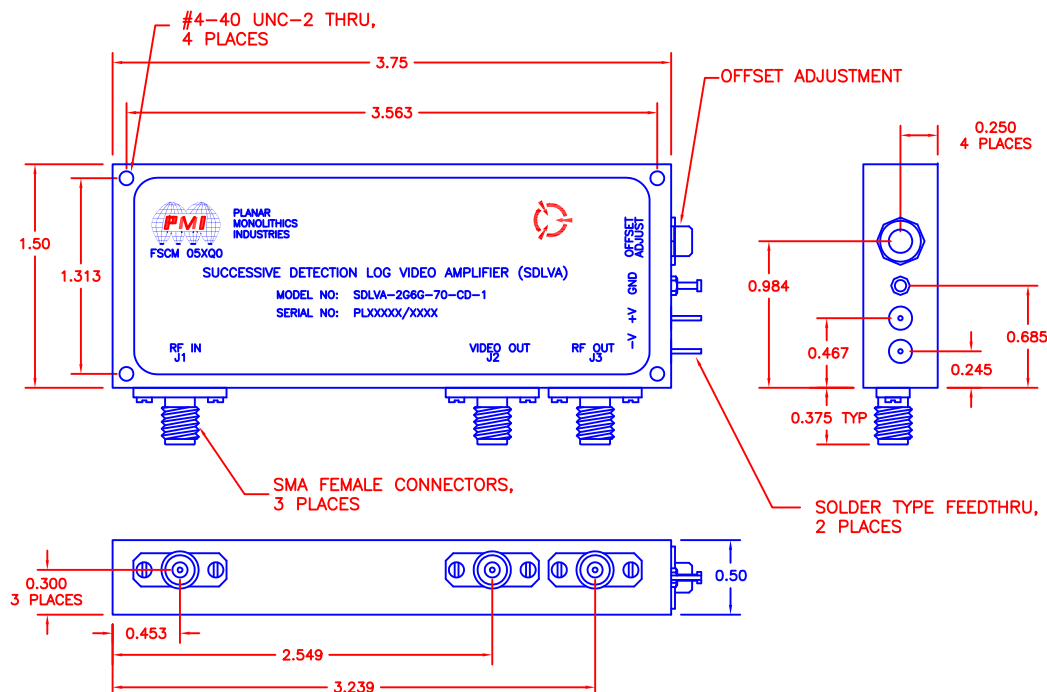
- SIZE: (L) 3.75" X (W) 1.50" X (H) 0.50"
- WEIGHT: 2.75 oz
- FINISH: GOLD PLATED

ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +71°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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	MOVED J1-J3	03/18/13	
	B1	ECN # 13-0074	06/27/13	
	B2	ECN # 14-0126	08/01/14	



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
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		CB HOLMES		PRODUCT FEATURE	
CHECKED				SDLVA-2G6G-70-CD-1	
ISSUED				2.00 TO 6.00 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER	
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27018251	
SCALE		N:S		SHEET	
				1 OF 1	

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010