

DESCRIPTION

THE MODEL SDLVA-0120-70 OPTION: 100M2G, 10DBM IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 0.1 TO 2.0 GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70 dB MINIMUM AND A TSS OF -65 dBm. THIS UNIT OFFERS A MAXIMUM FAST RISE TIME OF 25 nSec AND A RAPID FALL TIME OF 30 nSec

SPECIFICATIONS

- FREQUENCY RANGE: 0.1 TO 2.0 GHz
- DYNAMIC RANGE: 70 dBm MINIMUM, 75 dB TYPICAL
- LOG LINEARITY:
 - 250 MHz to 2 GHz: ± 2.0 dB MAXIMUM (-65 TO +5 dBm)
 - 100 MHz to 250 MHz: ± 2.0 dB MAXIMUM (-50 TO +5 dBm)
- MINIMUM LOGGING RANGE: -65 dBm
- MAXIMUM LOGGING RANGE: +5 dBm
- VSWR INPUT: 2.0:1 MAXIMUM (1.8:1 TYPICAL)
- TANGENTIAL SENSITIVITY: -65 dBm (-70 dBm TYPICAL)
- LIMITED IF OUTPUT: +10 dBm TYPICAL
- MAXIMUM RF INPUT POWER: +10 dBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - MAXIMUM OUTPUT VOLTAGE: 2.7 VOLTS
 - RISE TIME: 25 nsec Max
 - FALL TIME: 30 nsec Max
 - SETTLING TIME: 40 nsec Max
 - DC OFFSET: 0.1 V NOMINAL (ADJUSTABLE)
 - SLOPE: 25 mV/dB NOMINAL (at 1GHz)
 - LOG SLOPE VARIATION
 - WITH FREQUENCY: ± 0.5 mV/dB TYPICAL (OVER 80 MHz RF BANDWIDTH)
 - LOG SLOPE VARIATION
 - WITH TEMPERATURE: ± 0.5 mV/dB TYPICAL
 - PROPAGATION DELAY: 10 nSec TYPICAL
 - VIDEO LOAD: $100\Omega \pm 10\%$
- DC POWER SUPPLY:
 - +V: +7 TO +18V @ 300 mA
 - V: -7 TO -18V @ 160 mA TYP., 170 mA MAX
- SIZE: (L) 3.75" X (W) 1.50" X (H) 0.50"
- FINISH: GOLD PLATED

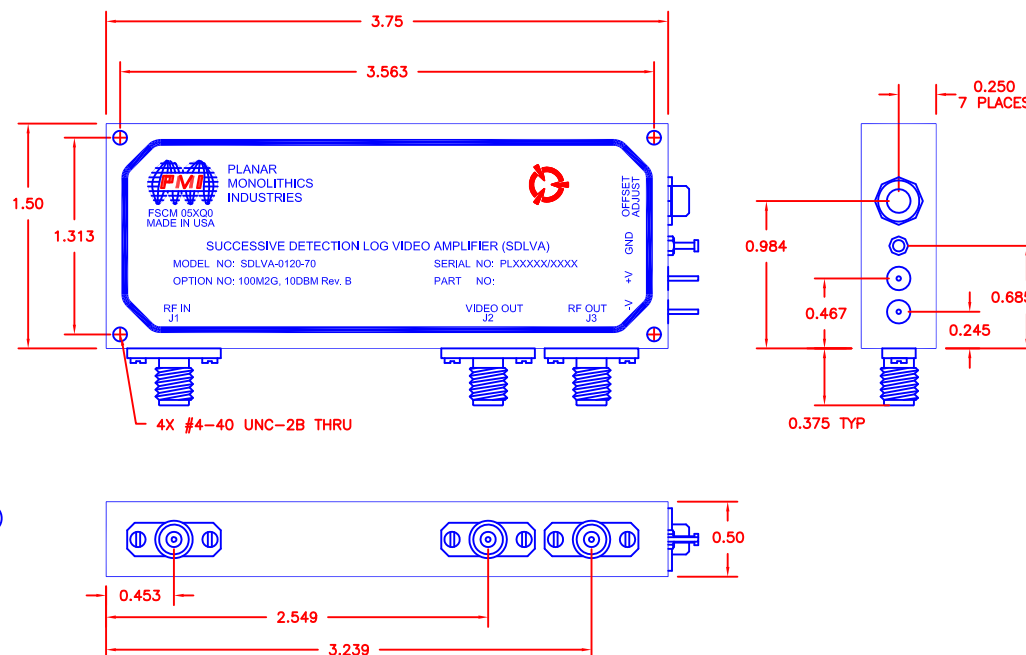
ENVIRONMENTAL RATINGS

- 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
	A1	ORIGINAL RELEASE	12/2/08	
	B1	UPDATED LINEARITY SPEC AT 100 MHZ	2/24/11	
	B2	ECN # 13-0208	11/23/13	
	B3	ECN # 17-0126	6/7/17	



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APPROVALS		DATE		TITLE	
DRAWN		8/29/08		PRODUCT FEATURE	
CHECKED				SDLVA-0120-70	
ISSUED				OPTION: 100M2G, 10DBM	
				0.1 TO 2.0 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER	
				SIZE	REV.
				FSCM NO.	
				DWG NO.	
				A	B3
				05XQ0	
				27009481-B	
				SCALE	SHEET
				N:S	1 OF 1