

DESCRIPTION

THE SDLVA-2020 SERIES OF TRULY DC-COUPLED SUCCESSIVE DETECTION LOG VIDEO AMPLIFIERS (SDLVA'S) ARE AVAILABLE IN EXTENDED 70/75dB DYNAMIC RANGE OVER THE RANGE OF 0.5-18 GHz BANDWIDTH, WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY. THE SIZE IS 3.00" X 3.50" X 0.50".

FEATURES

- TRULY DC COUPLED
- WIDE BANDWIDTHS
- FAST RISE TIMES
- SHORT RECOVERY TIMES
- SUPERIOR ACCURACY
- EXTENDED DYNAMIC RANGE CAPABILITY
- MINIATURE SIZE
- 7.2oz WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE: 0.5 TO 18 GHz
- FREQUENCY FLATNESS: ± 2.0 dB Typ (0.5-18GHz)
- TSS: -65dBm Min (8-18GHz)
- VSWR: 3.0:1, (0.5-18GHz, @ -20dBm)
- LOGGING RANGE: -65dBm TO +5dBm
- LOG LINEARITY: ± 1.75 dB Max (-65dBm TO +5dBm)
- LOG SLOPE: 20mV/dB ($\pm 10\%$ TOLERANCE)
- LOG TEMPERATURE STABILITY: ± 1.75 dB (0°C TO 60°C)
- RISE TIME (10% TO 90%): 20ns Max
- RECOVERY TIME: 200ns Max (-65dBm TO +5dBm)
- OUTPUT POWER: +10dBm ± 2.5 dB Typ
- OUTPUT VIDEO LOAD: 50 OHMS $\pm 10\%$ OR AS DESIRED
- POWER SUPPLY: +15V @ 600 mA Max
-15V @ 200 mA Max
- SIZE: 3.00" (L) x 3.50" (W) x 0.50" (H)
- FINISH: MOUNTING SIDE FREE OF PAINT (GOLD PLATED)
GRAY EPOXY POLIMIDE COATING IAW MIL-C-22750,
TYPE I OVER EPOXY POLIMIDE PRIMER
IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

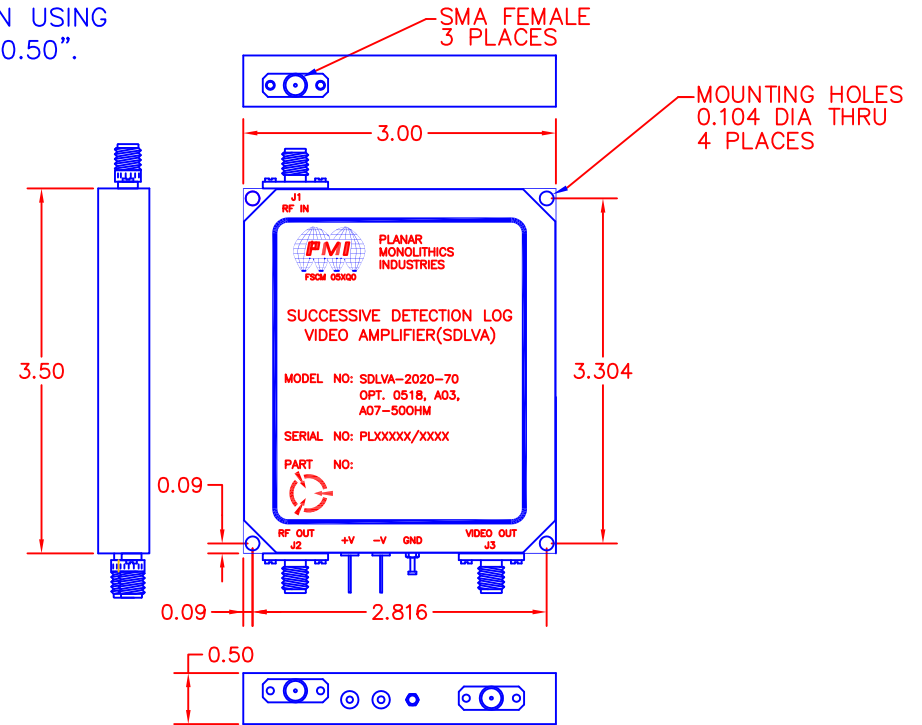
ENVIRONMENTAL RATINGS:

- TEMPERATURE: -54°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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/6/08	
	A2	ECN # 15-0007	1/30/15	
	A3	ECN # 22-0092	7/21/22	



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

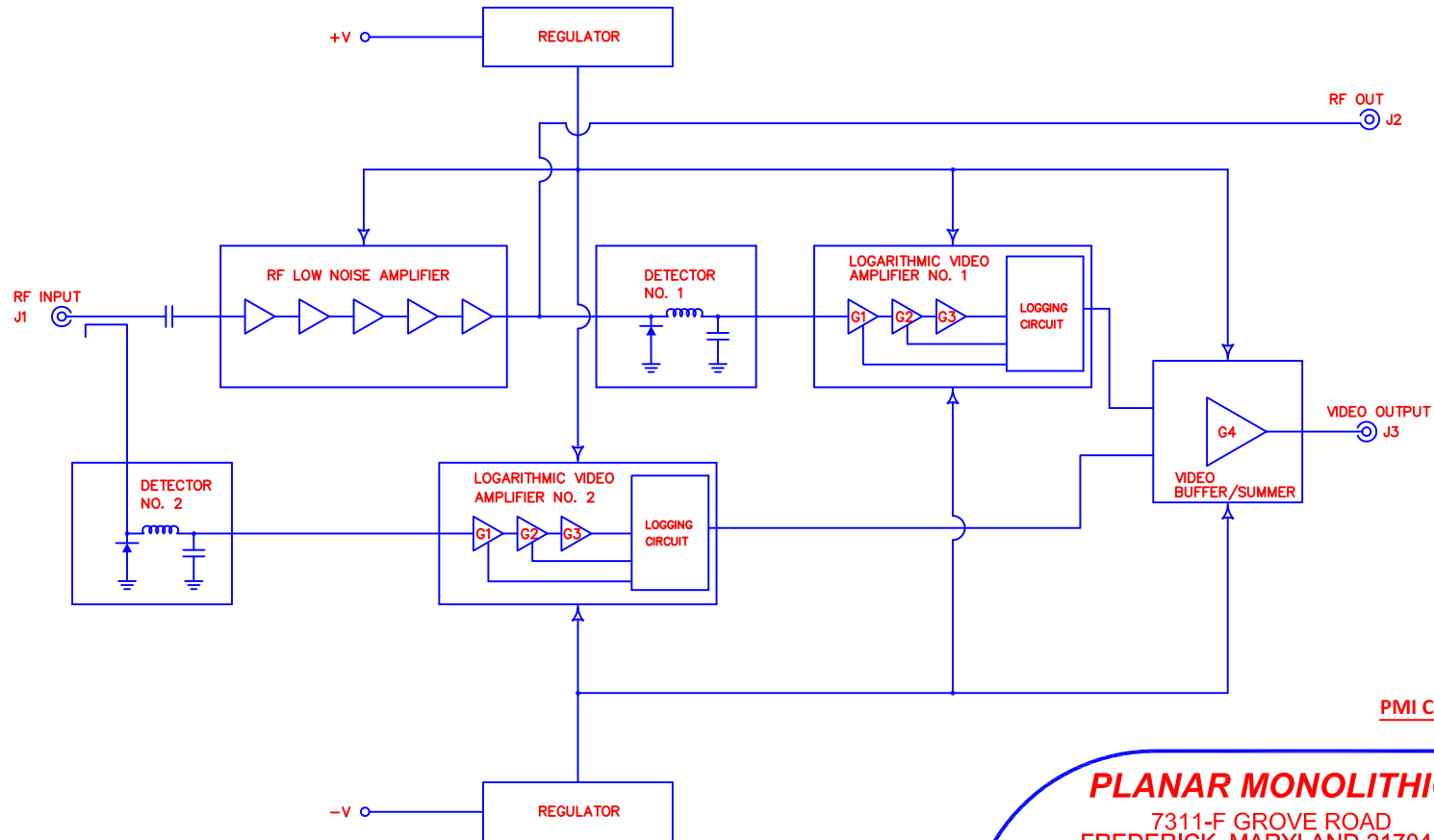
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E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN <i>EJE</i>		8/6/08	PRODUCT FEATURE SDLVA-2020-70 OPT. 0518, A03, A07-500HM SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER			A3
CHECKED			SIZE	FSCM NO.	DWG NO.	
ISSUED			A	05XQ0	27010088	
			SCALE	N:S		SHEET 1 OF 2

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SCALE N:S			SHEET 2 OF 2			