

DESCRIPTION

THE SDLVA-2020 SERIES OF TRULY DC-COUPLED SUCCESSIVE DETECTION LOG VIDEO AMPLIFIERS (SDLVA'S) ARE AVAILABLE IN EXTENDED 70/75 dB DYNAMIC RANGE OVER THE RANGE OF 1 TO 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/MMC TECHNOLOGY. THE SIZE IS 3.0" X 3.5" X 0.5".

SPECIFICATIONS

- FREQUENCY RANGE: 1.0 TO 2.0 GHz
- FREQUENCY FLATNESS: ±2.5 dB MAXIMUM
- LIMITED RF OUTPUT: 0 dBm MINIMUM
- TSS: -65 dBm MINIMUM
- OUTPUT STABILITY: ±2.5 dB MAXIMUM (0°C TO 60°C)
- VSWR: 2.0:1 (@ -20 dBm)
- LOGGING RANGE: -65 dBm TO +10 dBm
- LOG LINEARITY: ±1.75 dB MAXIMUM (-65 dBm TO +10 dBm)
- LOG SLOPE: 10 mV/dB (±10% TOLERANCE)
- LOG TEMPERATURE STABILITY: ±1.75 dB (0°C TO 60°C)
- RISE TIME: 30 ns MAXIMUM
- RECOVERY TIME: 250 ns MAXIMUM, 150 ns TYPICAL
- OUTPUT VIDEO LOAD: 50 Ω ±10%
- OUTPUT VOLTAGE: 1.00 VDC MAXIMUM
- POWER SUPPLY: +15 V @ 650 mA MAXIMUM
-15 V @ 175 mA MAXIMUM
- SIZE: 3.50" (L) x 3.00" (W) x 0.50" (H)
- FINISH: PAINTED BLUE

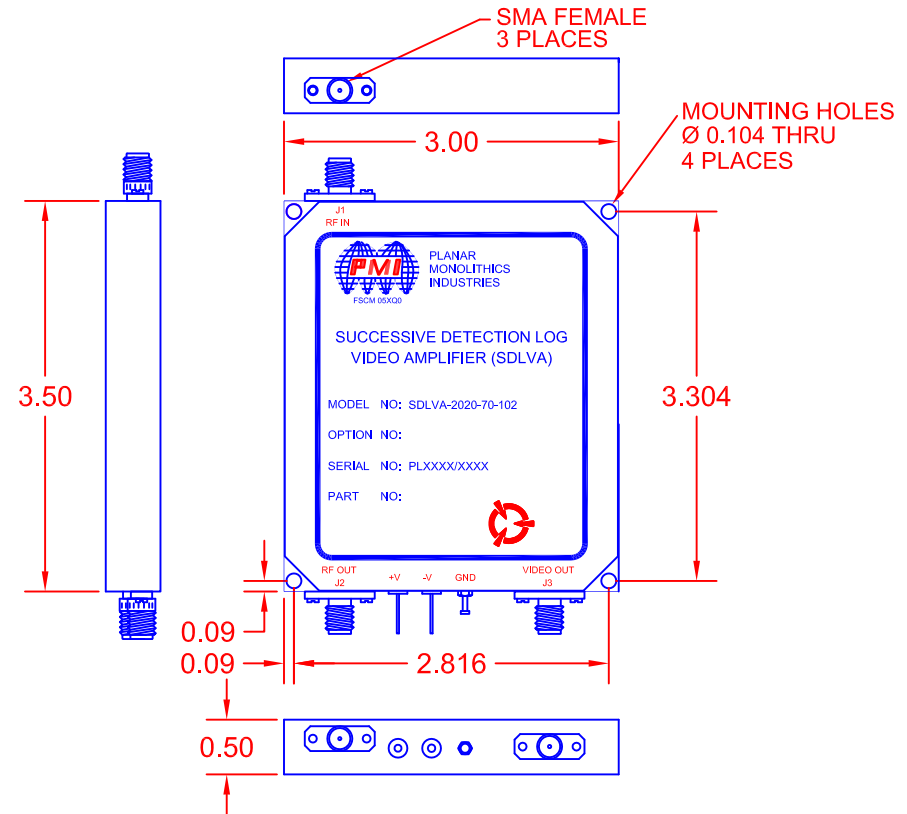
ENVIRONMENTAL RATINGS

- TEMPERATURE: -55°C TO +85°C (OPERATING)
-65°C TO +100°C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- VIBRATION: MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, 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
	-	PRELIMINARY	3/20/15	JP
	1	ECN # 22-0092	8/1/22	



PLANAR MONOLITHICS INDUSTRIES, INC.

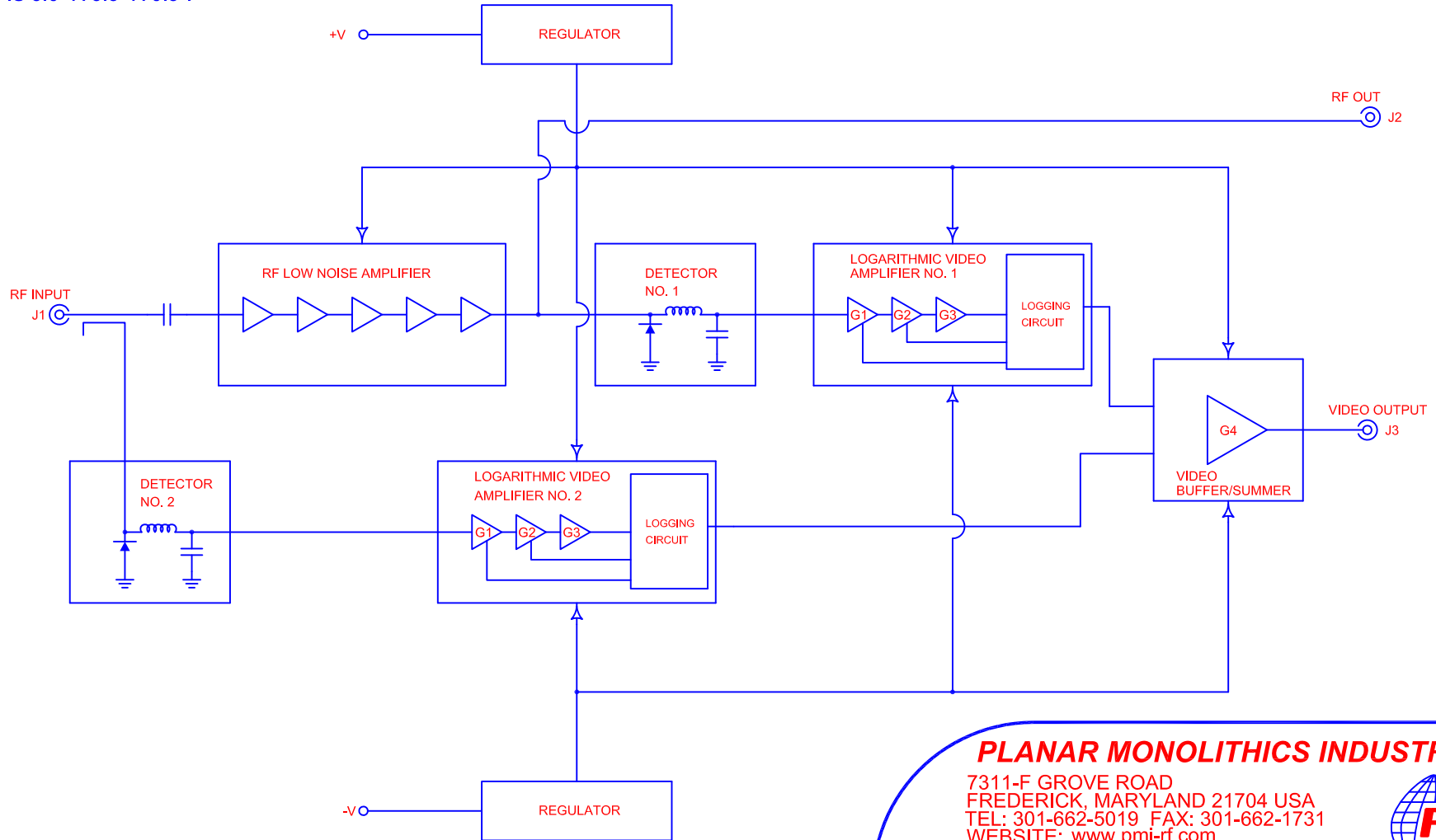
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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN JP		3/20/15	PRODUCT FEATURE SDLVA-2020-70-102 1 - 2 GHz, 70/75 dB, TRULY DC-COUPLED SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	05XQ0	PRELIMINARY	1
			SCALE	N:S		SHEET 1 OF 2

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APPROVALS		DATE	TITLE			
DRAWN		3/20/15	FUNCTIONAL BLOCK DIAGRAM SDLVA-2020-70-102			
CHECKED			1 - 2 GHz, 70/75 dB, TRULY DC-COUPLED SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	1
SCALE N:S			SHEET 2 OF 2			