

DESCRIPTION

PMI MODEL: SDLVA-50M18G-70 IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER OPERATING IN THE 0.05 GHz TO 18 GHz FREQUENCY BAND. IT FEATURES A BUILT IN VOLTAGE VARIABLE THRESHOLD DETECTOR CIRCUIT THAT IS SETUP TO MATCH THE VIDEO OUTPUT VOLTAGE TO WITHIN 5%. IN ADDITION, THIS MODEL HAS A TSS OF -70 dBm AND A DYNAMIC RANGE OF 70 dB, ALL IN A PACKAGE MEASURING ONLY 2.3" X 2.2" X 0.4"

SPECIFICATIONS

- FREQUENCY: ----- 0.05 GHz to 18.0 GHz
- FREQUENCY FLATNESS: ----- ± 2.0 dB MAX
- TSS: ----- -70 dBm TYP
- VSWR: ----- 2.0:1 MAX
- VIDEO COMPARATOR OUTPUT (V0):----- 5 V INTO 1 M Ω , 2.5 V INTO 50 Ω (TYP)
- VIDEO COMPARATOR THRESHOLD LEVEL: ---- ADJUSTABLE
-60 dBm to 0 dBm (OPERATING RANGE)
THRESHOLD LEVEL =
V1 $\pm 5\%$ and ± 25 mV (HYSTERESIS)
- LOG RANGE: ----- -70 dBm to 0 dBm MIN
- LOG SLOPE: ----- 25 mV/dB ($\pm 5\%$) @ 50 Ω LOAD
- LOG LINEARITY: ----- ± 1.75 dB (-65 TO 0 dBm) MAX
- PULSE RANGE: ----- 100 ns to DC
- RISE TIME: ----- 50 ns MAX
- RECOVERY TIME: ----- 400 ns MAX
- POWER SUPPLY: ----- +12 to +15 VDC @ 400 mA
-12 to -15 VDC @ 200 mA
- CONNECTORS: ----- SMA FEMALE
- SIZE: ----- 2.30" X 2.20" X 0.40"
- FINISH: ----- GOLD PLATED

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -40 $^{\circ}$ C TO +85 $^{\circ}$ C (OPERATING)
-54 $^{\circ}$ C TO +100 $^{\circ}$ 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

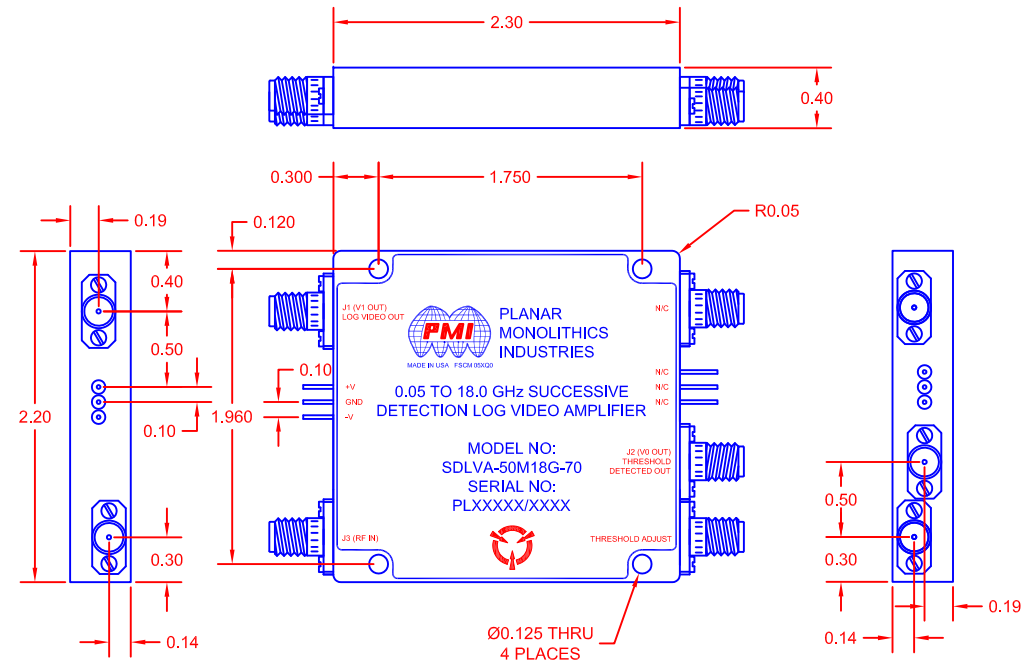
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	06/22/16	
	A1	ECN # 17-0269	12/22/17	

MECHANICAL OUTLINE

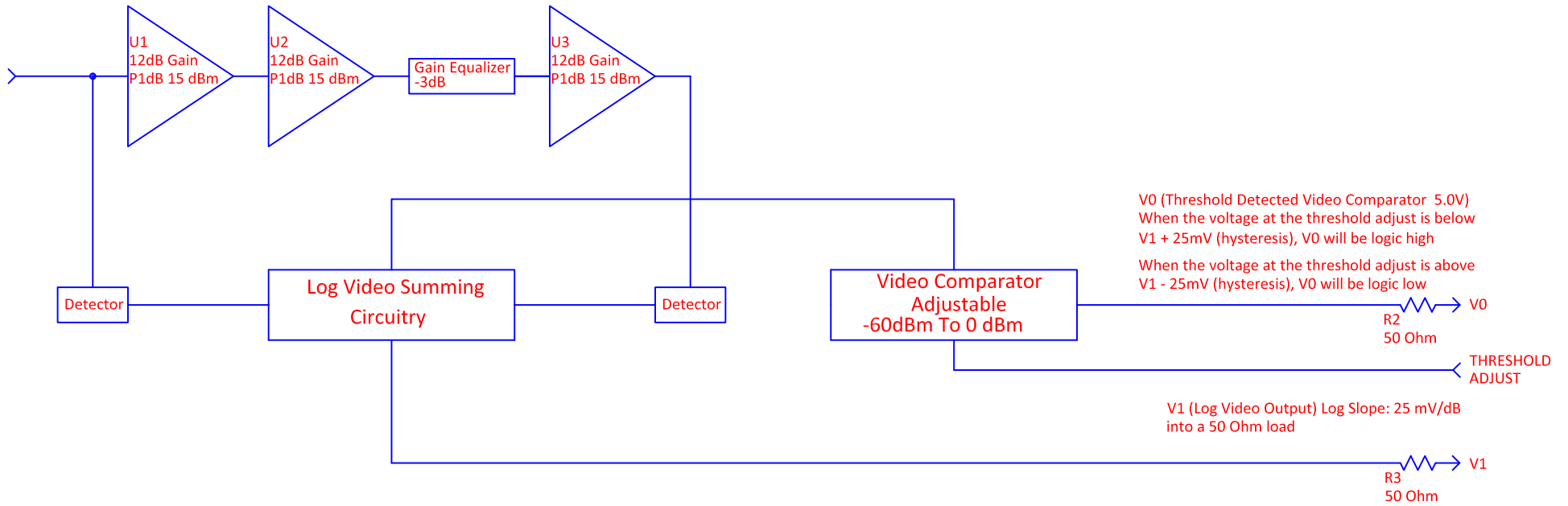


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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN <i>M. Berry</i>		06/22/16	PRODUCT FEATURE SDLVA-50M18G-70			
CHECKED			0.05 - 18 GHz Successive Detection Log Video Amplifier			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	27029811	A1
			SCALE	N:S	SHEET	1 OF 2

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	06/22/16	
	A1	ECN # 17-0269	12/22/17	



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CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27029811
ISSUED			SCALE N:S		REV. A1
				SHEET	2 OF 2