

DESCRIPTION

THE MODEL SDLVA-0120-70-CONDOR IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 750 TO 1250 MHZ FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70 DB MINIMUM AND A TSS OF -65 DBm. 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. THIS UNIT OFFERS A MAXIMUM FAST RISE TIME OF ≤ 25 nSec AND A RAPID FALL TIME OF ≤ 30 nSec

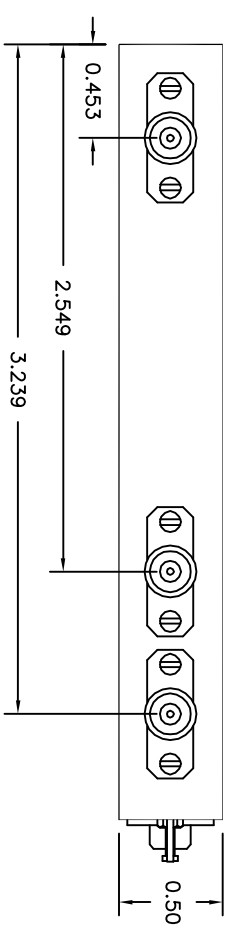
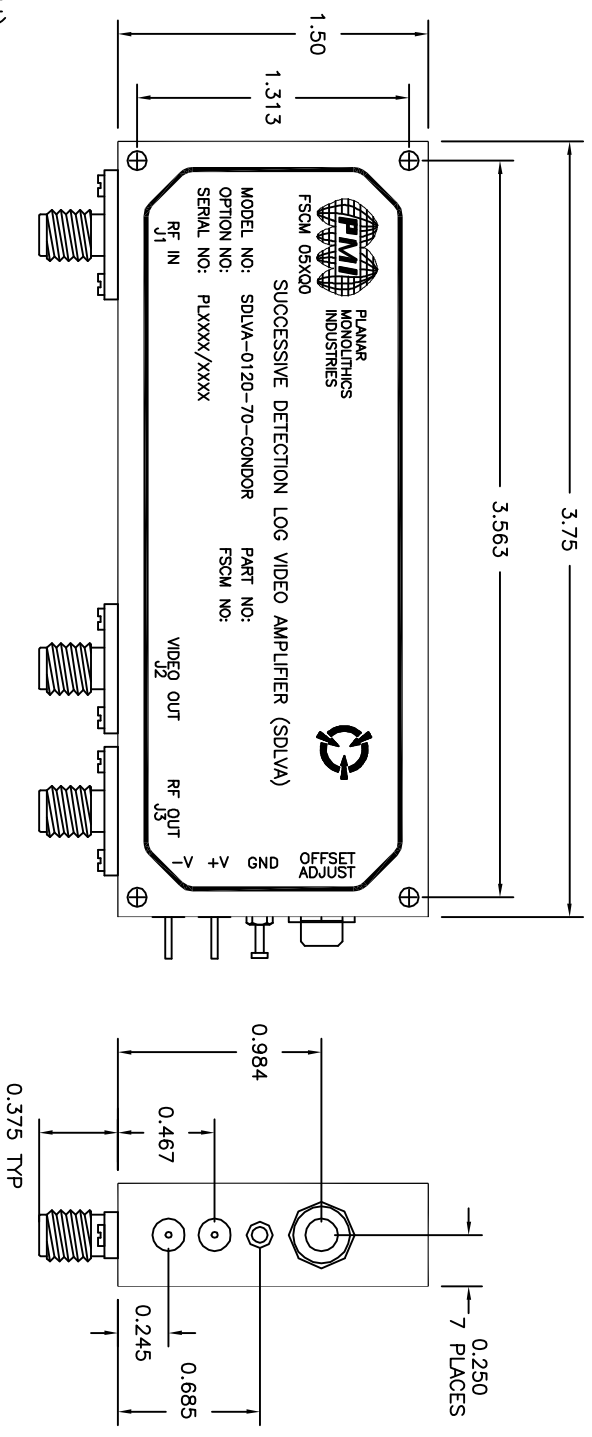
REVISIONS			DATE	APPROVED
ZONE	REV.	DESCRIPTION		
	A	ORIGINAL RELEASE	5/6/09	

SPECIFICATIONS

- FREQUENCY RANGE: 750 MHZ TO 1250 MHZ
- DYNAMIC RANGE: 70 DBm MINIMUM, 75 DB TYPICAL
- LOG LINEARITY: ± 2.5 DB MAXIMUM @ 1 GHZ
- MINIMUM LOGGING RANGE: -60 DBm (-65 DBm TYPICAL)
- MAXIMUM LOGGING RANGE: +5 DBm (+8 DBm TYPICAL)
- VSWR INPUT: 1.8:1 MAXIMUM (1.5:1 TYPICAL)
- TANGENTIAL SENSITIVITY: -65 DBm (-70 DBm TYPICAL)
- LIMITED IF OUTPUT: -6 DBm ± 2.5 DB
- MAXIMUM RF INPUT POWER: +10 DBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - MAXIMUM OUTPUT VOLTAGE: 2.7 VOLTS
 - RISE TIME: 25 nSec MAXIMUM
 - FALL TIME: 30 nSec MAXIMUM
 - SETTLING TIME: 40 nSec MAXIMUM
 - DC OFFSET: 0.1 V NOMINAL (ADJUSTABLE)
 - SLOPE: 25 mV/dB NOMINAL ± 5 mV / dB
- LOG SLOPE VARIATION WITH FREQUENCY: ± 0.5 mV/dB TYPICAL (OVER 80 MHZ RF BANDWIDTH)
- LOG SLOPE VARIATION WITH TEMPERATURE: ± 1 mV/dB TYPICAL
- PROPAGATION DELAY: 10 nSec MAXIMUM, 7 nSec TYPICAL
- VIDEO LOAD: 100 Ω $\pm 10\%$
- DC POWER SUPPLY:
 - +V: +7 TO +18V @ 200 mA MAX*
 - -V: -7 TO -18V @ 200 mA MAX
- *NOTE: DO NOT SUPPLY +V WITHOUT -V SUPPLIED AS WELL AS THIS MAY DESTROY THE UNIT
- SIZE: 3.75" x 1.50" 0.50"
- FINISH: PAINTED GRAY, BOTTOM SIDE UNPAINTED 50 uin. GOLD PLATING MIN. OVER COPPER FLASH OVER NICKEL FLASH PER MIL-G 45204 TYPE 2

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



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APPROVALS		DATE		TITLE	
DRAWN		5/6/09		PRODUCT FEATURE	
CHECKED				SDLVA-0120-70-CONDOR	
ISSUED				750 TO 1250 MHZ, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER	
SCALE	N:S	SIZE	FSCM NO.	DWG NO.	REV.
		A	05X00	27008414	A

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES: ±0.020
 XXX ±0.010
 XXXX ±0.010
 WEIGHT: 2.75 oz.