

DESCRIPTION

THE MODEL SDLVA-0120-70 OPTION: 500M105, 5DBM, MH IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 0.5 TO 1.5 GHz 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

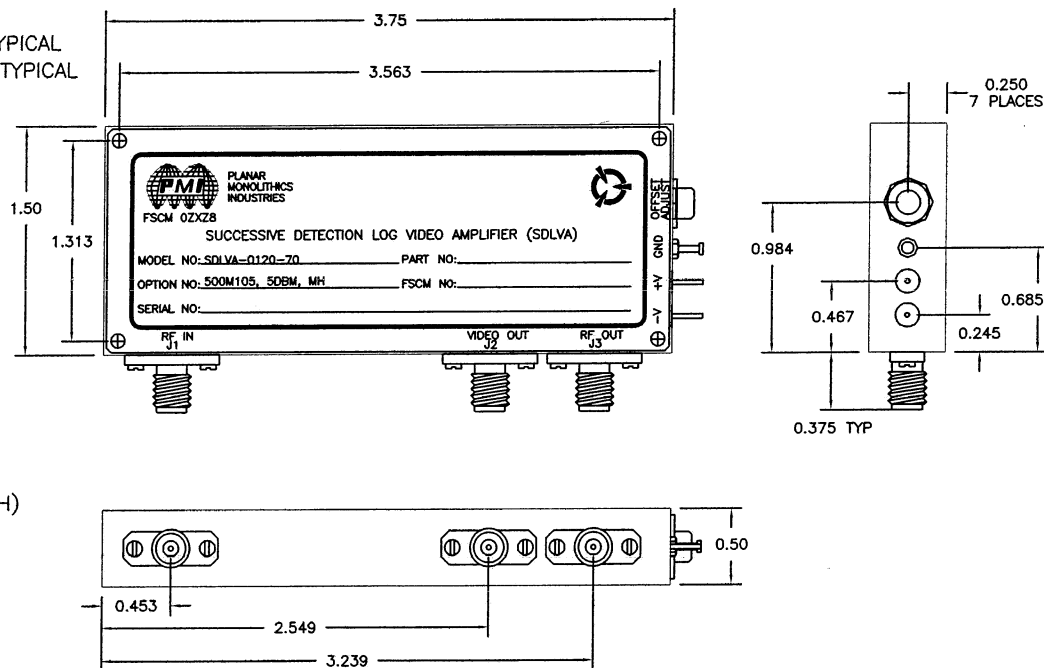
SPECIFICATIONS

- FREQUENCY RANGE: 0.5 TO 1.5 GHz
- DYNAMIC RANGE: 70 dBm MINIMUM, 75 dB TYPICAL
- LOG LINEARITY: ± 1.2 dB MAXIMUM (-60 TO 0 dBm), ± 0.8 dB TYPICAL
 ± 1.5 dB MAXIMUM (-65 TO +5 dBm), ± 1.2 dB TYPICAL
- 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: +5 dBm TYPICAL
- 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
 - 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: $100\Omega \pm 10\%$
- DC POWER SUPPLY:
 - +V: +7 TO +18V @ 120 mA
 - V: -7 TO -18V @ 120 mA
- SIZE: 3.75" x 1.50" 0.50"

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
	-	ORIGINAL RELEASE JOB# P410043	12/1/04	

PLANAR MONOLITHICS INDUSTRIES, INC.

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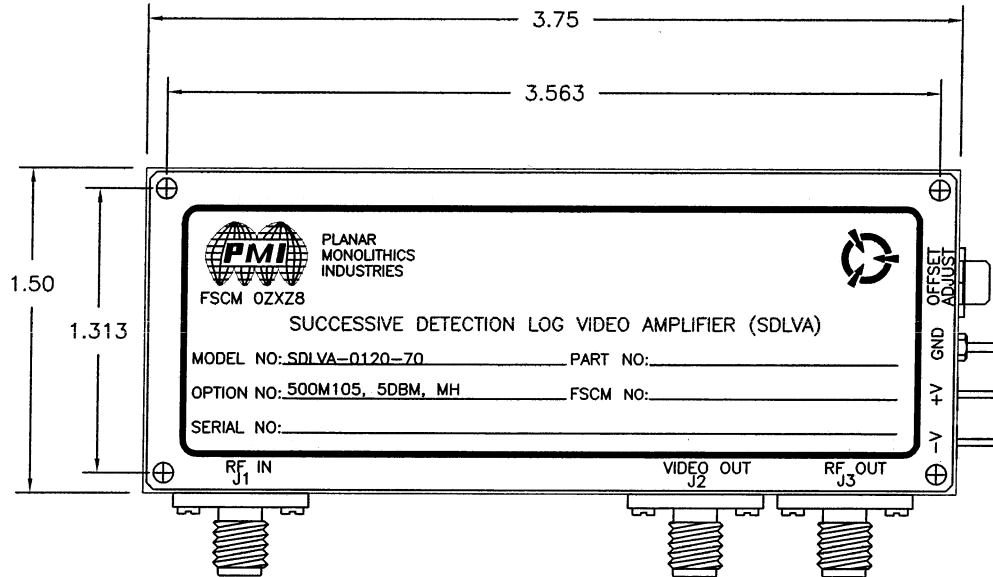


APPROVALS		DATE	TITLE				REV.
DRAWN	JDJ	12/1/04	PRODUCT FEATURE SDLVA-0120-70 OPTION: 500M105, 5DBM, MH 0.5 TO 1.5 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER				-
CHECKED	pt	3/14/05	SIZE	FSCM NO.	DWG NO.		
ISSUED			A	OZXZ8	100-7210		
			SCALE N:S		SHEET 1 OF 3		

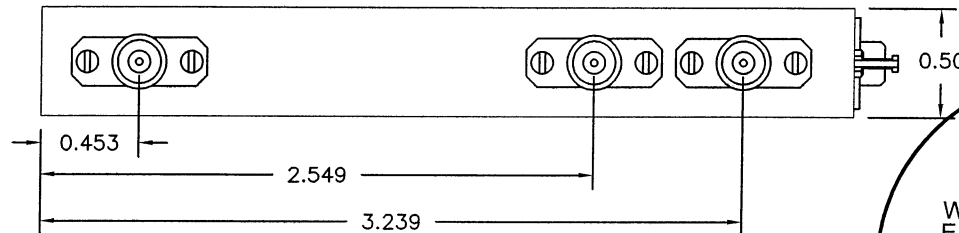
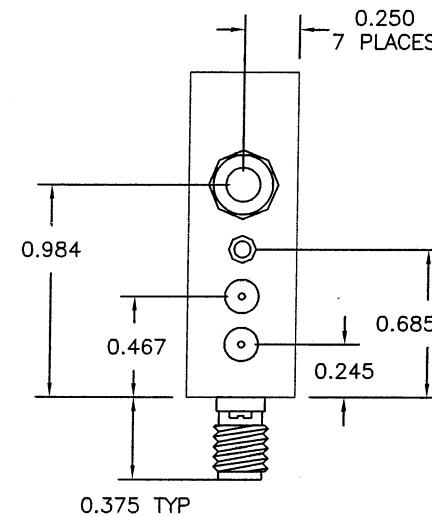
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	-	ORIGINAL RELEASE JOB# P410043	12/1/04	



MECHANICAL OUTLINE



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

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APPROVALS		DATE	TITLE			
DRAWN	<i>JDJ</i>	12/1/04	MECHANICAL OUTLINE SDLVA-0120-70 OPTION: 500M105, 5DBM, MH 0.5 TO 1.5 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER			
CHECKED	<i>fs</i>	12/14/04	SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-7210	-
			SCALE	N:S		SHEET 2 OF 3