

DESCRIPTION

THE MODEL SDLVA-0120-70 OPTION: 500M105, 10DBM, MH-50 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 ns AND A RAPID FALL TIME OF ≤ 30 ns

SPECIFICATIONS

- FREQUENCY RANGE: 0.5 TO 1.5 GHz
- DYNAMIC RANGE: 70 dBm MINIMUM, 75 dB TYPICAL
- LOG LINEARITY: ± 0.8 dB Typ, ± 1.2 dB Max @ (-60 TO 0 dBm)
..... ± 1.2 dB Typ, ± 1.5 dB Max @ (-65 TO +5 dBm)
- MINIMUM LOGGING RANGE: ... -60 dBm (-65 dBm TYPICAL)
- MAXIMUM LOGGING RANGE: ... +5 dBm (+8 dBm TYPICAL)
- VSWR INPUT: 1.5:1 Typ, 1.8:1 Max
- TANGENTIAL SENSITIVITY: -65 dBm (-70 dBm TYPICAL)
- LIMITED IF OUTPUT: +10 dBm TYPICAL
- MAXIMUM RF INPUT POWER: ... +10 dBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - MAXIMUM OUTPUT VOLTAGE: 2.7 VOLTS
 - RISE TIME: 25 ns Max
 - FALL TIME: 30 ns Max
 - SETTLING TIME: 40 ns Max
 - DC OFFSET: 0.1 V NOMINAL (ADJUSTABLE)
 - LOG VIDEO 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 ns MAXIMUM, 7 ns TYPICAL
- VIDEO LOAD: $50\Omega \pm 10\%$
- DC POWER SUPPLY:
 - +V: +7 TO +18V @ 150 mA
 - V: -7 TO -18V @ 150 mA
- SIZE: (H) 3.75" X (W) 1.50" X (H) 0.50"
- FINISH: GOLD PLATED

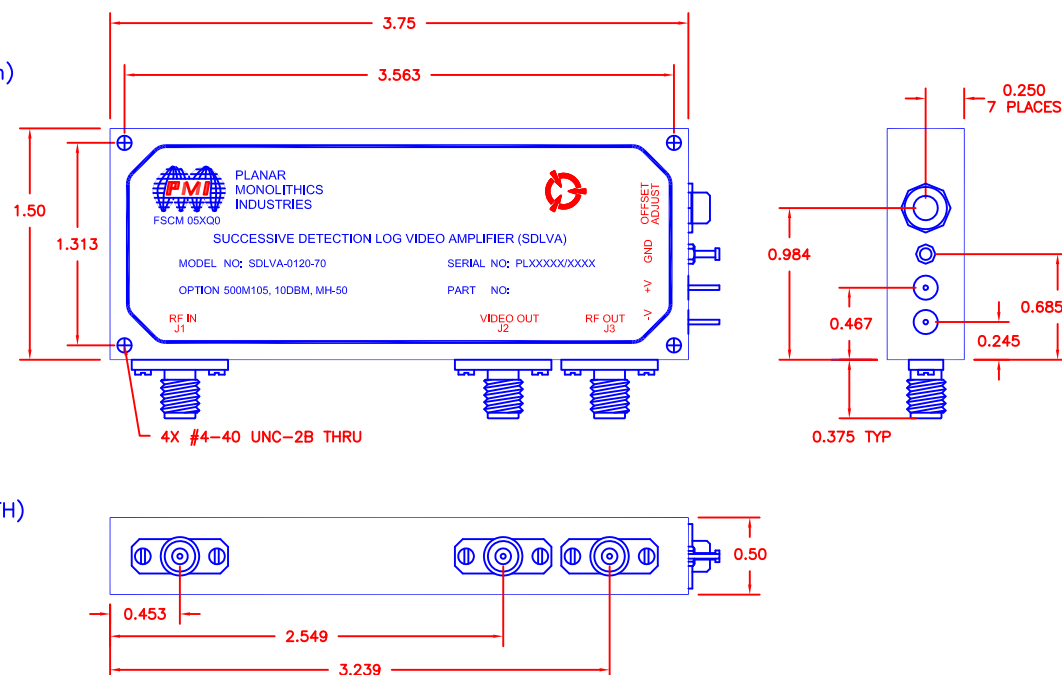
ENVIRONMENTAL RATINGS

- **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
	A	ORIGINAL RELEASE	10/04/12	



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APPROVALS		DATE		TITLE	
DRAWN <i>flk</i>		10/04/12		PRODUCT FEATURE SDLVA-0120-70	
CHECKED				OPTION: 500M105, 10DBM, MH-50	
ISSUED				0.5 TO 1.5 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER	
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27017681	
SCALE		N:S		SHEET	
				1 OF 1	