

DESCRIPTION

THE MODEL SDLVAC-0120-70 IS A MINIATURE SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES OVER THE 100 MHz TO 2.0 GHz FREQUENCY RANGE. THIS SDLVA OFFERS 70 dB HIGH DYNAMIC RANGE.

SPECIFICATIONS

- INPUT FREQUENCY 0.1 TO 2.0 GHz
- DYNAMIC RANGE 70 dB
- VSWR 2:1 MINIMUM
- LOG VIDEO OUTPUT:
 - SLOPE FIXED BETWEEN 10 AND 50 mV/dB
 - LOG SLOPE VARIATION WITH FREQUENCY ± 0.5 dB OVER 100 MHz SUBBAND
 - LOG SLOPE VARIATION WITH TEMPERATURE ± 1 dB OVER OPERATING TEMPERATURE
 - INSTANTANEOUS LOG SLOPE $\pm 25\%$ WITHIN DYNAMIC RANGE
 - VIDEO OUTPUT IMPEDANCE 100 Ω
 - VIDEO BANDWIDTH 20 MHz MINIMUM
- INPUT LEVEL -75 dBm TO +5 dBm
- OPERATING TEMPERATURE -40°C TO 85°C
- LOG ERROR (LINEARITY) ± 1 dB FROM BEST FIT LINE OVER DYNAMIC RANGE.
- SUPPLY -5V \odot 135 mA MAXIMUM,
+5V \odot 80 mA MAXIMUM
- NOISE FIGURE ≤ 8 dB
- LIMITED IF OUTPUT -20 dBm MINIMUM FOR INPUT LEVELS
 ≥ -60 dBm, 50 OHMS
- SIZE $0.500'' \times 0.400'' \times 0.090''$

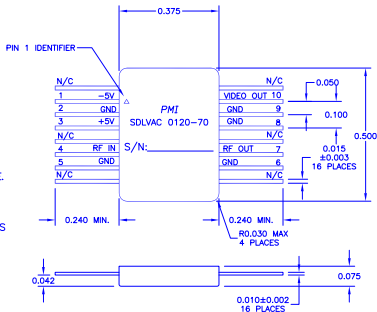
ENVIRONMENTAL RATINGS

- TEMPERATURE -40°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: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-			

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
- 3) WEIGHT: 0.2 OZ

	
APPROVALS	DATE
DESIGN <i>JR</i>	4/6/00
CHECKED	

PLANAR MONOLITHICS INDUSTRIES
FREDERICK, MARYLAND

PRODUCT FEATURE
SDLVAC-0120-70

SIZE A SHEET 1 OF 1 PRELIMINARY