

DESCRIPTION

THE LVD-218-50SF (OPTION 0518) SERIES ARE SUPER-FAST DLVA'S AND ARE AVAILABLE IN STANDARD 50dB AND EXTENDED 70/75dB DYNAMIC RANGE OVER THE FULL 0.5-18GHz BANDWIDTH, WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

FEATURES

- TRULY DC COUPLED
- WIDE BANDWIDTHS
- FAST RISE TIMES
- SHORT RECOVERY TIMES
- SUPERIOR ACCURACY
- EXTENDED DYNAMIC RANGE CAPABILITY
- MINIATURE SIZE
- 1.75 OZ WEIGHT

SPECIFICATIONS

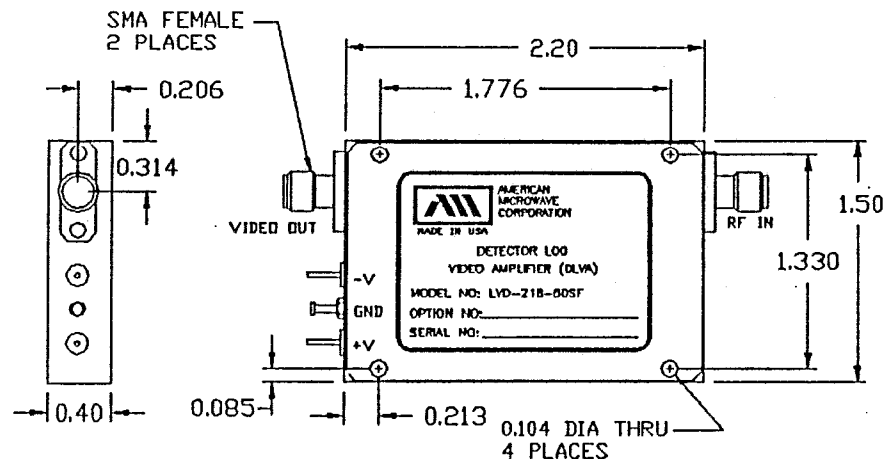
- FREQUENCY RANGE 0.5 TO 18 GHz
- FREQUENCY FLATNESS @ -20dBm ±1.5dB
- LOGGING RANGE -40 TO 0dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ±1.0dB MAXIMUM (-40 TO 0dBm)
- LOG SLOPE 50mV/dB
- LOG SLOPE ACCURACY ±4% OF AVERAGE SLOPE
- TEMPERATURE STABILITY ±1.0 dB MAXIMUM (0°C TO +60°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME (10% TO 90% POINTS) 10nS MAXIMUM, (5nS TYPICAL)
- SETTLING TIME 45nS MAXIMUM
- RECOVERY TIME 150nS TYPICAL, 300nS MAXIMUM
- TSS -40dBm MINIMUM
- VSWR (RF) 3.0:1
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50Ω MINIMUM LOAD)
- DC POWER (50Ω LOAD)
 - +V 12V @ 120mA MAXIMUM
 - V 12V @ 80mA MAXIMUM
- SIZE 2.2" X 1.5" X 0.4"

AVAILABLE OPTIONS (SPECIFY)

- A01 EXTENDED 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02 EXTENDED 0.5 TO 18 GHz RF FREQUENCY RANGE
- A03 FASTER RISE/RECOVERY TIMES
- A04 ALTERNATE LOG SLOPES
- A05 HIGH POWER RF CW/PEAK PROTECTION
- A06 EXTENDED LOGGING RANGE
- A07 OTHER VIDEO LOADS

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE, JOB# 30244-1	07/27/93	<i>My</i>

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ±0.020
X.XXX ±0.010
- 3) WEIGHT: 1.75 OZ

ENVIRONMENTAL RATINGS

- TEMPERATURE -54°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

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		PRODUCT FEATURE LVD-218-50SF (OPTION 0518) 0.5 TO 18 GHz, 40/45dB, SUPER-FAST TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN <i>Res</i>	07/27/93		
CHECKED <i>My</i>	07/27/93		