

DESCRIPTION

THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN EXTENDED 70/75dB AND STANDARD 50dB DYNAMIC RANGE OVER THE FULL 0.5-18 GHz 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. THE SIZE IS 3.0" x 3.5" x 0.5".

FEATURES

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

SPECIFICATIONS

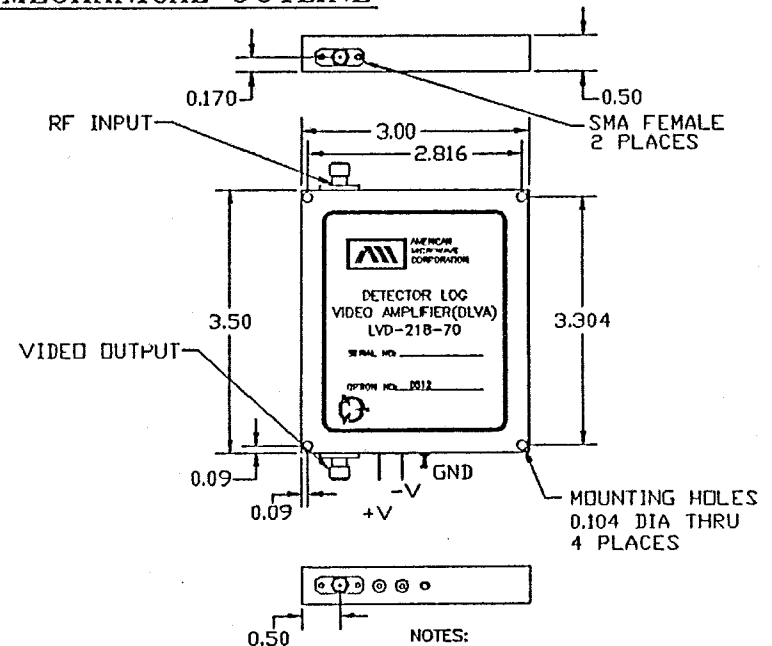
- FREQUENCY RANGE.....0.5 TO 12 GHz
- FREQUENCY FLATNESS..... ± 2.0 dB MAXIMUM
- TSS.....-68dBm
- VSWR.....3.0:1 MAXIMUM (2.5:1 TYPICAL)
- DYNAMIC RANGE.....80dB
- LOGGING RANGE.....-70 TO +10dBm
- LOG LINEARITY..... ± 1.75 dB
- LOG SLOPE.....50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY..... $\pm 5\%$ MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY..... ± 1.5 dB (0°C TO 60°C)
- RISE TIME.....30nS MAXIMUM, 20nS TYPICAL
- RECOVERY TIME.....250nS TYPICAL, 350nS MAXIMUM
- VIDEO LOAD.....50 OHMS (TYPICAL), OR AS DESIRED
- DC POWER (NO LOAD)
 - +V.....9 TO 18V @ 350mA TYPICAL, 375mA MAXIMUM
 - V.....9 TO 18V @ 200mA MAXIMUM
- SIZE.....3.00" x 3.5" x 0.5"

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
- A08.....-54°C TO +85°C WITH LOG TEMPERATURE STABILITY OF ± 1.75 dB

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE JOB# 307165	08/10/93	<i>[Signature]</i>


MECHANICAL OUTLINE



- NOTES:
- 1) DIMENSIONS ARE IN INCHES
 - 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
 - 3) WEIGHT: 7.2 OZ
 - 4) UNIT IS EPOXY SEALED

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

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938	
		PRODUCT FEATURE LVD-218-70/75 (OPTION 0512) 0.5 TO 12 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN <i>R.A.</i>	08/10/93		
CHECKED <i>[Signature]</i>			