

DESCRIPTION

THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN EXTENDED 70/75dB AND STANDARD 50dB DYNAMIC RANGE OVER THE FULL 2-18 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

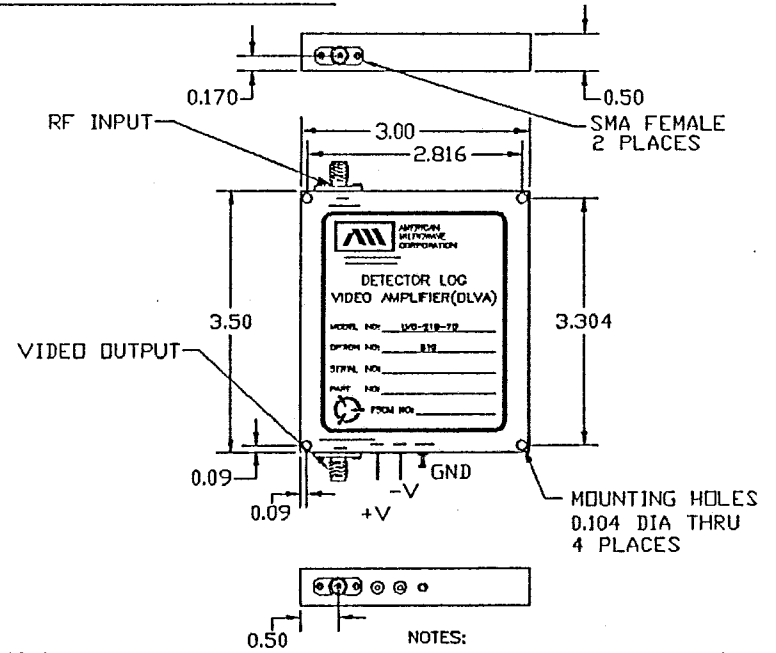
- FREQUENCY RANGE 6 TO 10 GHz
- FREQUENCY FLATNESS ± 1.75 dB MAXIMUM, ± 1.5 dB TYPICAL
- TSS -70dBm MINIMUM
- VSWR 2.5:1 MAXIMUM
- DYNAMIC RANGE 80dB
- LOGGING RANGE -70 TO +10dBm
- LOG LINEARITY ± 1.75 dB, ± 1.5 dB TYPICAL
- LOG SLOPE ($\pm 10\%$ TOLERANCE) 50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY $\pm 5\%$ MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY ± 1.75 dB MAXIMUM (0°C TO 60°C), ± 1.5 dB TYPICAL
- RISE TIME (10% TO 90% POINTS) 30nS MAXIMUM
- RECOVERY TIME 350nS MAXIMUM
- VIDEO LOAD 50 OHMS (TYPICAL), OR AS DESIRED
- DC POWER (NO LOAD)
 - +V 15V @ 350mA MAXIMUM
 - V 15V @ 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 OTHER SUPPLY VOLTAGES
- A09 ± 1.0 dB LOG LINEARITY
- A10 ± 1.0 dB FREQUENCY FLATNESS
- A11 ± 1.5 dB OUTPUT STABILITY
- A12 -54°C TO +85°C OPERATION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE JOB# 209247-2	07/24/93	<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 610) 6 TO 10 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS DRAWN <i>RA</i> CHECKED <i>[Signature]</i>	DATE 07/24/93 07/24/93	SIZE A	SHEET 1 OF 2 DWG. # 100-3179