

DESCRIPTION

THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN STANDARD 50dB AND EXTENDED 70/75dB 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.

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

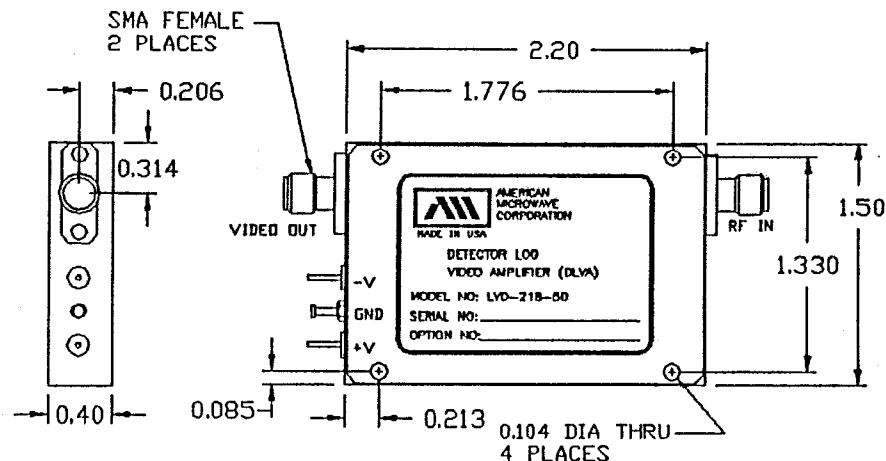
- FREQUENCY RANGE 5.2 TO 5.9 GHz
- FREQUENCY FLATNESS ± 0.2 dB MAXIMUM
- LOGGING RANGE -40 TO 0dBm MINIMUM
- USEFUL RANGE -40dBm TO +5dBm
- LOG LINEARITY ERROR ± 1.0 dB MAXIMUM (± 0.5 dB TYPICAL)
- LOG SLOPE 50mV/dB
- LOG SLOPE ACCURACY $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (± 0.5 dB TYPICAL) (0°C TO +60°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME 20nS MAXIMUM, 15nS TYPICAL
- SETTLING TIME 45nS MAXIMUM
- RECOVERY TIME 150nS MAXIMUM
- TSS -42dBm MINIMUM (-44dBm TYPICAL)
- VSWR (RF) 2.0:1 MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50 Ω MINIMUM LOAD)
- DC POWER (WITH 100 Ω LOAD)
 - +V 9 TO 18V @ 120mA MAXIMUM
 - V 9 TO 18V @ 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# 206170-1	11/21/92	<i>Joy</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

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938	
APPROVALS	DATE		
DRAWN <i>Red</i>	11/21/92		
CHECKED <i>Max</i>	11/21/92		
		17F A	SHEET 1 OF 2
		DWC # 100-3265	