

DESCRIPTION

THE LVD-218-50-811 IS A CUSTOM DESIGNED DLVA WITH -40 TO +5 dBm DYNAMIC RANGE, 100 nSEC RECOVERY TIME, 8 TO 11 GHz FREQUENCY RANGE AND HIGH ACCURACY. OTHER SERIES OF DLVA'S ARE AVAILABLE IN STANDARD 50dB AND EXTENDED 70/75dB 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.

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 8 TO 11 GHz
- FREQUENCY FLATNESS @ -20dBm ±1.0dB MAXIMUM
- LOGGING RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ±1.5dB MAXIMUM (±1.0dB TYPICAL) (-40dBm TO +5dBm)
- LOG SLOPE 50mV/dB
- LOG SLOPE ACCURACY ±10% OF AVERAGE SLOPE
- TEMPERATURE STABILITY ±1.0 dB MAXIMUM, ±0.5dB TYPICAL (-40°C TO +70°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME (10% TO 90% POINTS) 10nS MAXIMUM
- SETTling TIME 25nS MAXIMUM
- RECOVERY TIME 100nS MAXIMUM WITHIN 1 dB OF NOISE FLOOR
- 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 (100Ω LOAD)
 - +V 15V @ 120mA MAXIMUM
 - V 15V @ 80mA MAXIMUM
- SIZE 2.2" X 1.5" X 0.4"

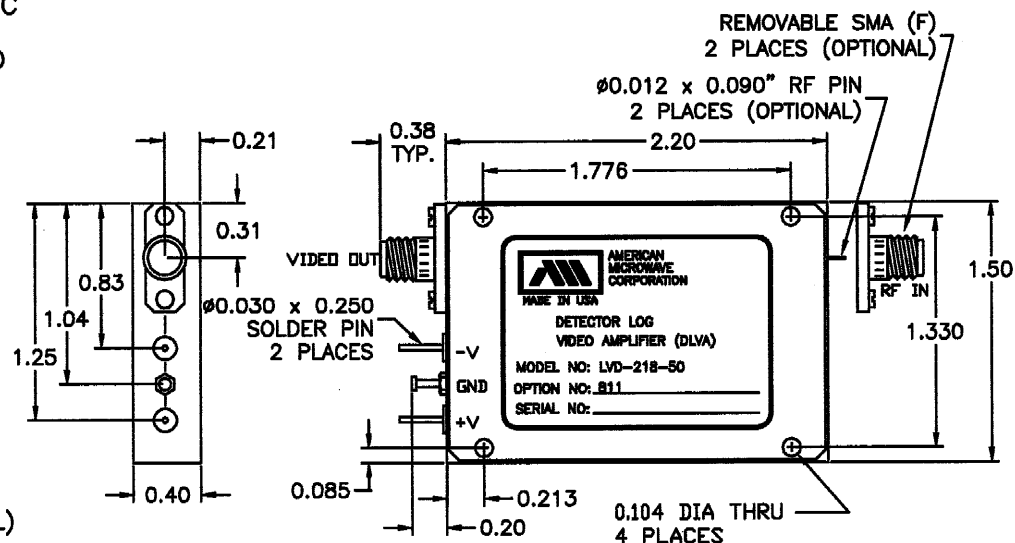
AVAILABLE OPTIONS (SPECIFY)

- 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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE, JOB# 707126-1 KOR	8/21/97	

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	PRODUCT FEATURE LVD-218-50-811 8 TO 11 GHz, 40/45dB, TRULY DC-COUPLED, 100 nS RECOVERY DETECTOR LOG VIDEO AMPLIFIER	
DRAWN WJP	8/21/97	SIZE A	SHEET 1 OF 2
CHECKED			DWG. # 100-4250