

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
- 5.5 OZ WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE 8 TO 18 GHz (USABLE FROM 6 TO 18 GHz) (EXTENDED FREQUENCY RANGES TO 0.2 TO 20 GHz AVAILABLE)
- FREQUENCY FLATNESS ± 0.7 dB (NOMINAL @ ≤ 23 dBm)
- LOGGING RANGE -40 TO 0 dBm (EXTENDED LOGGING RANGES AVAILABLE)
- USEFUL RANGE -40 TO +5 dBm
- LOG LINEARITY ERROR ± 0.5 dB (-40 dBm TO 0 dBm)
- LOG SLOPE 100mV/dB (ALTERNATE LOG SLOPES AVAILABLE)
- RISE TIME (10% TO 90% POINTS) 17 nS TYPICAL, 20 nS MAXIMUM
- RECOVERY TIME (-40 dBm TO 0 dBm) 150 nS TYPICAL, 300 nS (WITHIN ± 200 mV OF BASELINE) MAXIMUM
- TSS -42dBm
- VSWR @ -23 dBm 2.0:1 TYPICAL, 3.0:1 MAXIMUM
- MAXIMUM RF INPUT +15 dBm (RF HIGH POWER PROTECTION AVAILABLE)
- VIDEO OUTPUT 0 TO 5 VOLTS (93 Ω LOAD) (OTHER VIDEO LOADS AVAILABLE)
- OUTPUT LEVEL STABILITY ± 1 dB (-54°C TO +85°C)
- DC POWER SUPPLY
 - +V 15V @ 140mA MAXIMUM WITH CW (60 mA NO SIGNAL)
 - V 15V @ 70mA MAXIMUM WITH CW (60 mA NO SIGNAL)
- SIZE 3.34" X 2.47" X 0.6"

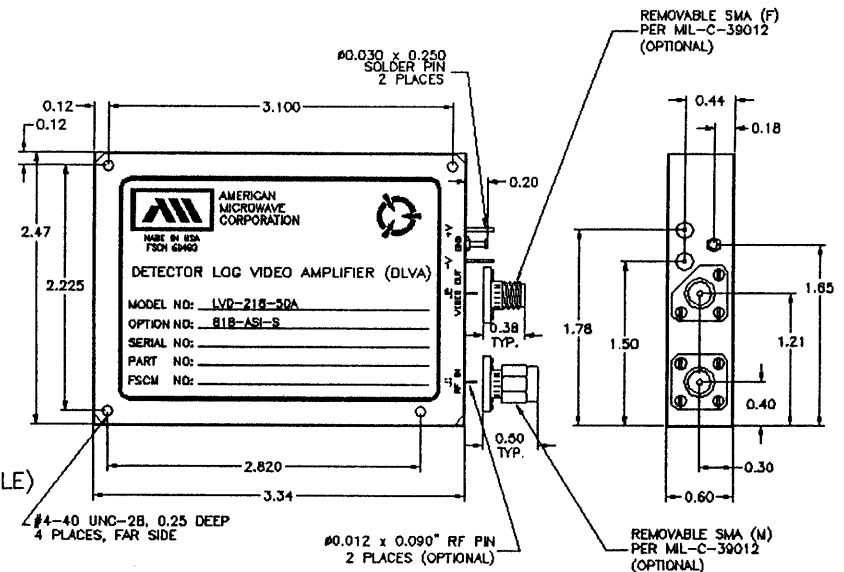
AVAILABLE OPTIONS (SPECIFY)

- 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
		ORIGINAL RELEASE JOB# 30245	07/24/93	

MECHANICAL OUTLINE




NOTES:

1. DIMENSIONS ARE IN INCHES
2. TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
3. WEIGHT: 5.5 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	
APPROVALS	DATE	SIZE	SHEET 1 OF 2
DRAWN WSP	07/24/93		DWG. # 100-3181-4
CHECKED L. N. J.	10/14/97		