

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

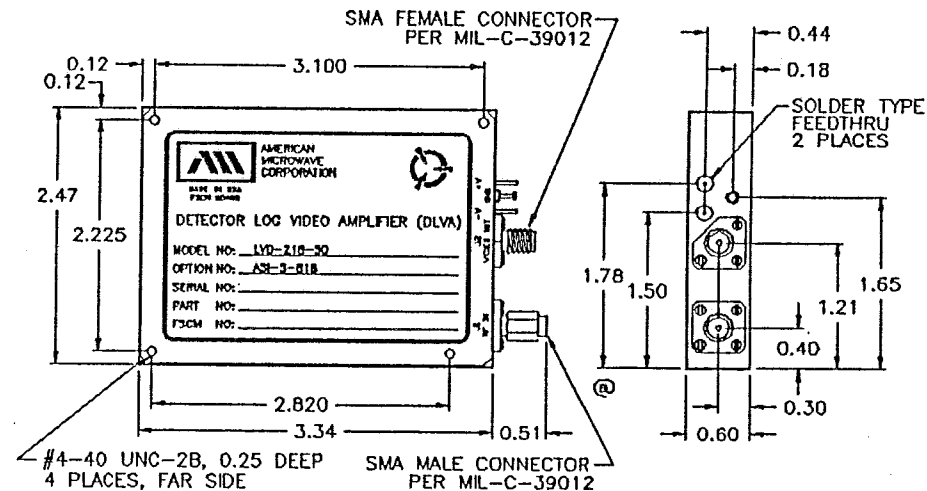
- FREQUENCY RANGE 8 TO 18 GHz
- FREQUENCY FLATNESS ± 0.7 dB
- LOGGING RANGE -40 TO 0 dBm
- USEFUL RANGE -40 TO +5 dBm
- LOG LINEARITY ERROR ± 0.5 dB
- LOG SLOPE $\pm 10\%$ TOLERANCE 100mV/dB
- LOG SLOPE ACCURACY $\pm 10\%$ OF AVERAGE SLOPE
- OUTPUT LEVEL STABILITY ± 1.0 dB (-54°C TO +85°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME (10% TO 90% POINTS) 17nS
- RECOVERY TIME 300nS (WITHIN ± 200 mV OF BASELINE)
- TSS -42dBm
- VSWR @ -23 dBm 3.0:1
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 5 VOLTS (50 Ω MINIMUM LOAD)
- DC POWER (NO LOAD)
 - +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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE JOB# 30245-2	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: 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

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		PRODUCT FEATURE LVD-218-50 (OPTION ASI-S-818) 8 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN <i>R.A.</i>	07/24/93		
CHECKED <i>M.L.</i>	07/28/93		