

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

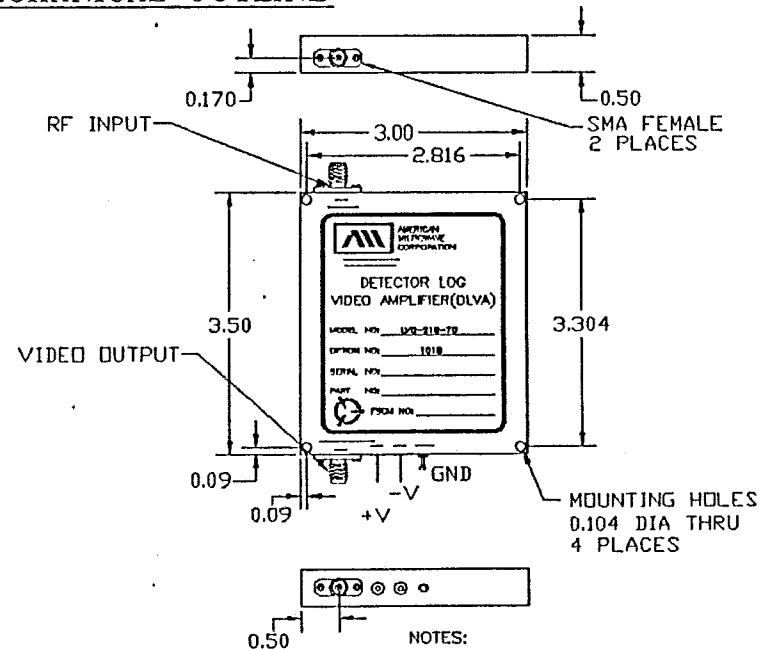
- FREQUENCY RANGE 10 TO 18 GHz
- FREQUENCY FLATNESS ± 1.75 dB MAXIMUM, ± 1.5 dB TYPICAL
- TSS -70dBm MINIMUM
- VSWR 2.5:1 MAXIMUM
- DYNAMIC RANGE 80dB
- LOGGING RANGE -70 TO +10dBm
- LOG LINEARITY ± 1.75 dB, ± 1.5 dB TYPICAL
- LOG SLOPE ($\pm 10\%$ TOLERANCE) 50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY $\pm 5\%$ 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 EXTENDED TO 18GHz OPERATION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE JOB# 209247-3	07/24/93	<i>Am</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

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		PRODUCT FEATURE LVD-218-70/75 (OPTION 1018) 10 TO 18 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN <i>RA</i>	07/24/93		
CHECKED <i>RA</i>			