

## DESCRIPTION

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

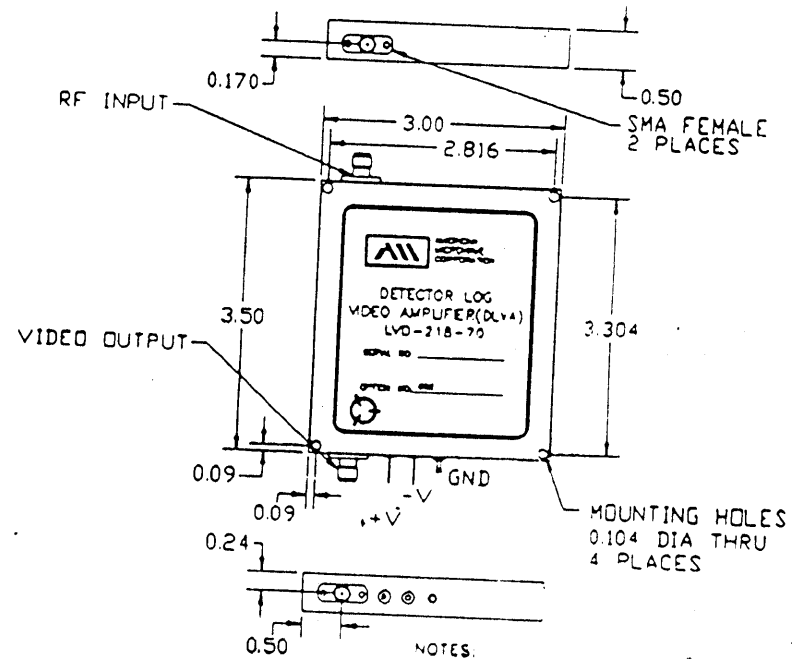
FREQUENCY RANGE	0.5 TO 2 GHz
FREQUENCY FLATNESS	±1.5dB
TSS	-70dBm
VSWR	2.5:1
DYNAMIC RANGE	80dB
LOGGING RANGE	-70 TO +10dBm
LOG LINEARITY	±1.5dB
LOG SLOPE	50mv/dB OR AS DESIRED
LOG SLOPE ACCURACY	±5% MAXIMUM OF AVERAGE SLOPE
LOG TEMPERATURE STABILITY	±1.5dB
RISE TIME	30ns MAXIMUM, 20ns TYPICAL
RECOVERY TIME	200ns TYPICAL, 300ns MAXIMUM
VIDEO LOAD	50 OHMS (TYPICAL), OR AS DESIRED
DC POWER (NO LOAD)	
+V	9 TO 18V @ 350mA
-V	9 TO 18V @ 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

ZONE		REV.		DESCRIPTION		DATE	APPROVED
A				ORIGINAL RELEASE		11/22/92	<i>[Signature]</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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APPROVALS	DATE	<b>PRODUCT FEATURE</b> <b>LVD-218-70/75 (OPTION 052)</b> 0.5 TO 2 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
DRAWN <i>RA</i>	11/22/92	SIZE A	SHEET 1 OF 2
CHECKED <i>[Signature]</i>	11/24/92	DWG. # 100-3305	