

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

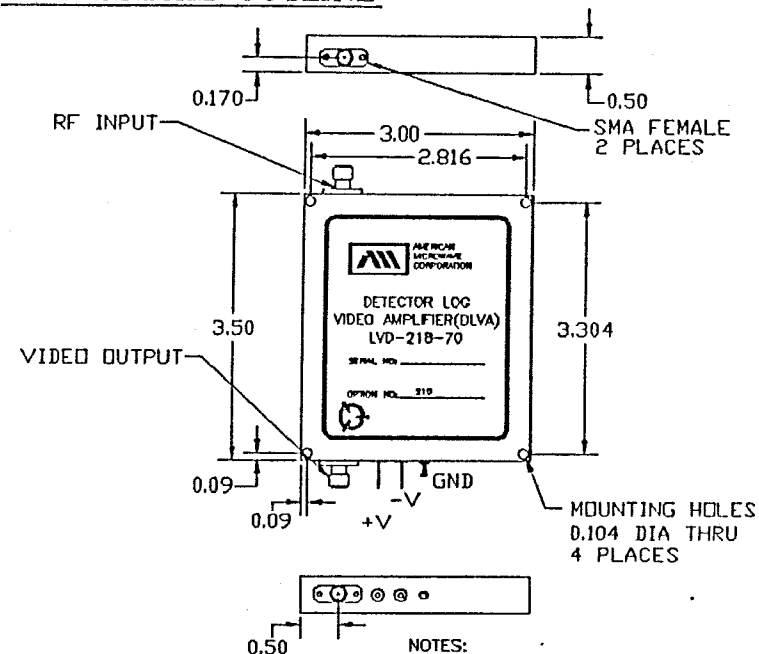
- FREQUENCY RANGE 2 TO 10 GHz
- FREQUENCY FLATNESS ± 1.75 dB TYPICAL (± 2.0 dB MAXIMUM)
- TSS -68dBm
- VSWR 2.5:1 TYPICAL (2.75:1 MAXIMUM)
- DYNAMIC RANGE 80dB
- LOGGING RANGE -7D TO +10dBm
- LOG LINEARITY ± 1.75 dB MAXIMUM (± 1.5 dB TYPICAL)
- LOG SLOPE 50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY $\pm 5\%$ MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY ± 1.5 dB MAXIMUM, ± 1.0 dB TYPICAL (0°C TO 50°C)
- RISE TIME 30nS MAXIMUM, 20nS TYPICAL
- RECOVERY TIME 250nS TYPICAL, 350nS MAXIMUM
- VIDEO LOAD 50 OHMS (TYPICAL), OR AS DESIRED
- DC POWER (NO LOAD)
 - +V 9 TO 18V @ 350mA TYPICAL, 375mA MAXIMUM
 - 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
- A08 -54°C TO +85°C WITH LOG TEMPERATURE STABILITY OF ± 1.75 dB MAXIMUM


REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE JOB# 306139	07/31/93	<i>[Signature]</i>

MECHANICAL OUTLINE



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 210) 2 TO 10 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS DRAWN <i>Rd</i> CHECKED <i>A</i>	DATE 07/31/93		