

DESCRIPTION

THE LVD-618 SERIES DLVA'S ARE AVAILABLE IN STANDARD 50dB AND EXTENDED 70/75dB DYNAMIC RANGE OVER THE 6-18 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
- 1.75 OZ WEIGHT

SPECIFICATIONS

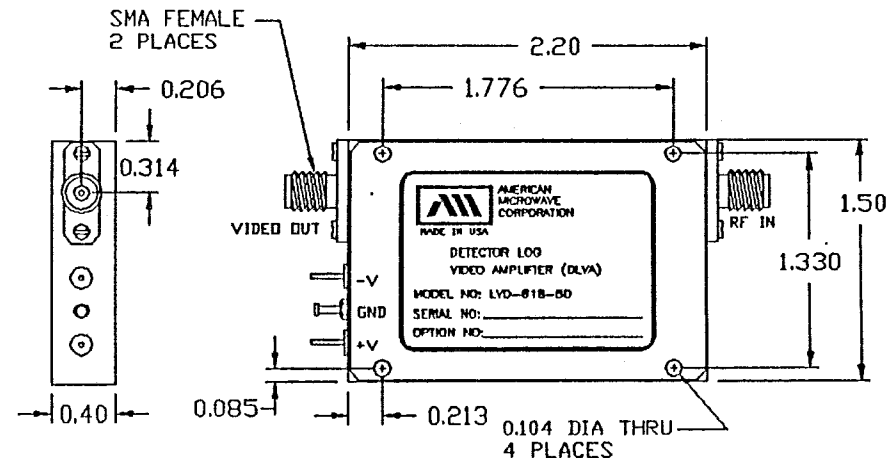
- FREQUENCY RANGE 6 TO 18 GHz
- FREQUENCY FLATNESS ± 1.5 dB MAXIMUM
- LOGGING RANGE -40 TO -0dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ± 1.0 dB MAXIMUM (-40 TO 0dBm)
- LOG SLOPE 50mV/dB
- LOG SLOPE ACCURACY $\pm 10\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54' TO +85'C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME 15nS MAXIMUM
- SETTLING TIME 45nS MAXIMUM
- RECOVERY TIME 250nS TYPICAL 500nS MAXIMUM
- TSS -40dBm MINIMUM
- VSWR (RF) 2.5: MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50 Ω MINIMUM LOAD)
- DC POWER (NO LOAD)
 - +V 9 TO 18V @ 120MA MAXIMUM
 - V 9 TO 18V @ 80MA MAXIMUM
- SIZE 2.2" X 1.5" X 0.4"
- VIDEO LOAD 50 OHMS MINIMUM

AVAILABLE OPTIONS (SPECIFY)

- A01 EXTENDED 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02 EXTENDED 0.5 TO 18 GHz RF FREQUENCY RANGE
- A04 ALTERNATE LOG SLOPES
- A05 HIGH POWER RF CW/PEAK PROTECTION
- A06 EXTENDED LOGGING RANGE (-67dBm TO +10dBm)
- A07 OTHER VIDEO LOADS
- A08 RECOVERY TIME, 250nS MAXIMUM
- A09 FREQUENCY FLATNESS OF ± 1 dB MAXIMUM

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE JOB # 30484	07/24/93	<i>Joy</i>

MECHANICAL OUTLINE




NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
- 3) WEIGHT: 1.75 OZ

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-618-50 6 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN			
CHECKED			