

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
- 1.75 OZ WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE 2 TO 18 GHz
- FREQUENCY FLATNESS ± 2.0 dB MAXIMUM @ -20 dBm
- LOGGING RANGE -40 TO -0 dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ± 1.5 dB MAXIMUM (-40 TO 0 dBm)
- LOG SLOPE 50mV/dB $\pm 10\%$
- LOG SLOPE ACCURACY $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54° TO +85°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME 20nS MAXIMUM
- SETTling TIME 45nS MAXIMUM
- RECOVERY TIME 300nS MAXIMUM
- TSS -40 dBm MINIMUM
- VSWR (RF) 2.7:1 MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50 Ω MINIMUM LOAD)
- DC POWER (NO LOAD)

+V 12V @ 120mA MAXIMUM
 -V 12V @ 80mA MAXIMUM
 OTHER VOLTAGES AVAILABLE

- SIZE 2.2" X 1.5" X 0.4"

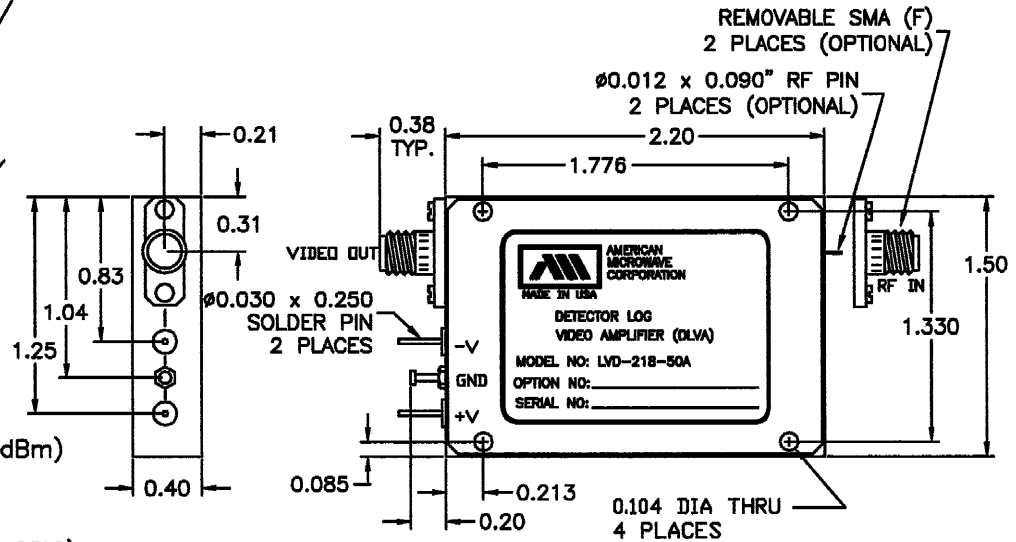
AVAILABLE OPTIONS (SPECIFY)

- 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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	2/18/98	

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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APPROVALS	DATE
DRAWN WJP	2/18/98
CHECKED	

PRODUCT FEATURE

LVD-218-50A

2 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER

SIZE A

SHEET 1 OF 2

DWG. # 100-2811-4