

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

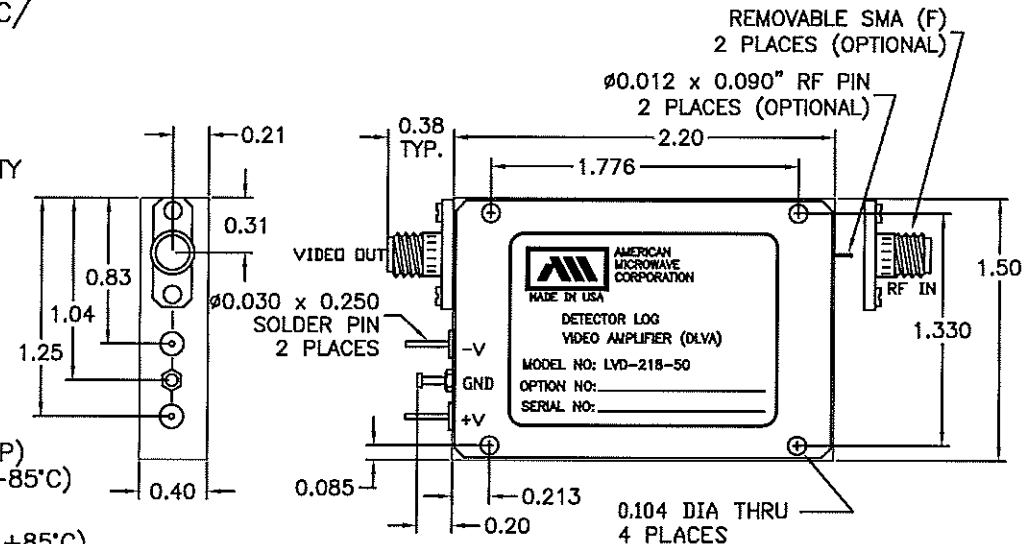
- FREQUENCY RANGE 2 TO 18 GHz
- FREQUENCY FLATNESS ± 1.0 dB MAXIMUM
- LOGGING RANGE -40 TO -0dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ± 0.5 dB MAXIMUM (ROOM TEMP)
 ± 1.0 dB MAXIMUM (-54° TO +85°C)
- LOG SLOPE 50mV/dB ($\pm 10\%$)
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54° TO +85°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME 20nS MAXIMUM
- SETTLING TIME 45nS MAXIMUM
- RECOVERY TIME 300nS MAXIMUM
- TSS -42 dBm TYP. (-40dBm MIN)
- VSWR (RF) 3:1 MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS TYPICAL (50 Ω MIN LOAD)
- DC POWER (NO LOAD)
 - +V 12V @ 75MA MAXIMUM
 - V 12V @ 75MA MAXIMUM

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
- A07 OTHER VIDEO LOADS

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/21/92	
	B	SEE ECN # 04-028	9/5/04	
	C	SEE ECR # 09-025	6/9/09	<i>JK</i>

MECHANICAL OUTLINE



NOTES:


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

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

NOTE: THE ABOVE SPECIFICATION ARE SUBJECT TO CHANGE OR REVISION.

* Units are designed to meet Environmental ratings but not tested. If Environmental Testing is required, please contact Sales Department.

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938		
APPROVALS		DATE		
DRAWN <i>WSP</i>		11/21/92		
MODIFIED <i>EJE</i>		9/5/04		
CHECKED <i>JK</i>		6/10/09		
PRODUCT FEATURE LVD-218-50				
2 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER				
SIZE	A	SHEET	1 OF 2	DWG. # 100-2811
				REV C