

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

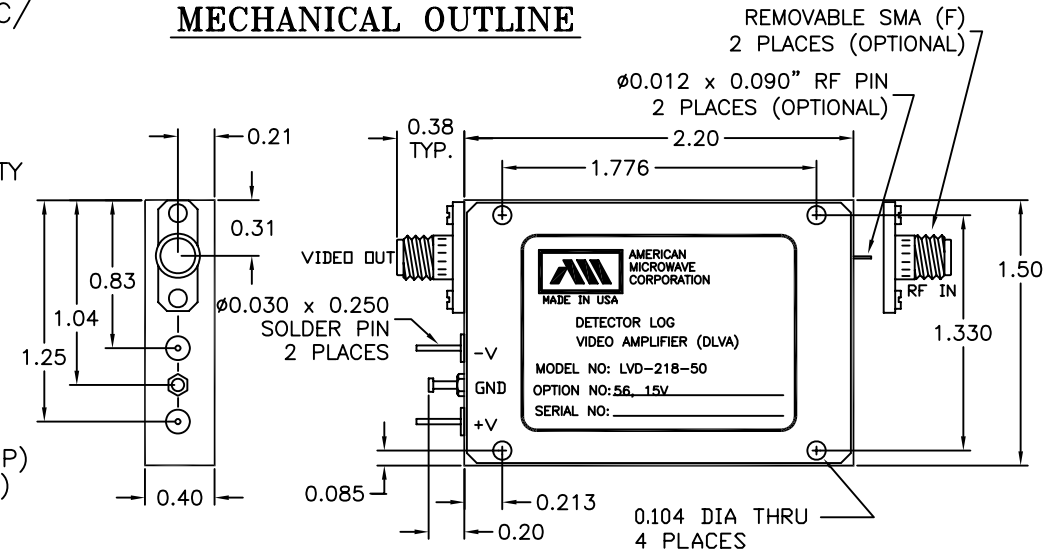
- TRULY DC COUPLED
- WIDE BANDWIDTHS
- FAST RISE TIMES
- SHORT RECOVERY TIMES
- SUPERIOR ACCURACY
- EXTENDED DYNAMIC RANGE CAPABILITY
- MINIATURE SIZE
- 1.75 OZ WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE 5 TO 6 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 AVE (-54° TO +85°C)
- LOG SLOPE 50mV/dB
- 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 150nS TYPICAL 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 15V @ 120MA MAXIMUM
 - V 15V @ 80MA MAXIMUM
 - OTHER VOLTAGES AVAILABLE
- SIZE 2.2" X 1.5" X 0.4"

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/21/92	
	B	SEE ECN # 04-028	3/5/04	RA

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

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938	
APPROVALS	DATE	PRODUCT FEATURE	
DRAWN <i>PRB</i>	07/20/06	LVD-218-50 OPT: 56, 15V	
MODIFIED <i>RA</i>	07/21/06	5 TO 6 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
CHECKED		SIZE A	SHEET 1 OF 4
		DWG. # 100-2811-8	REV B

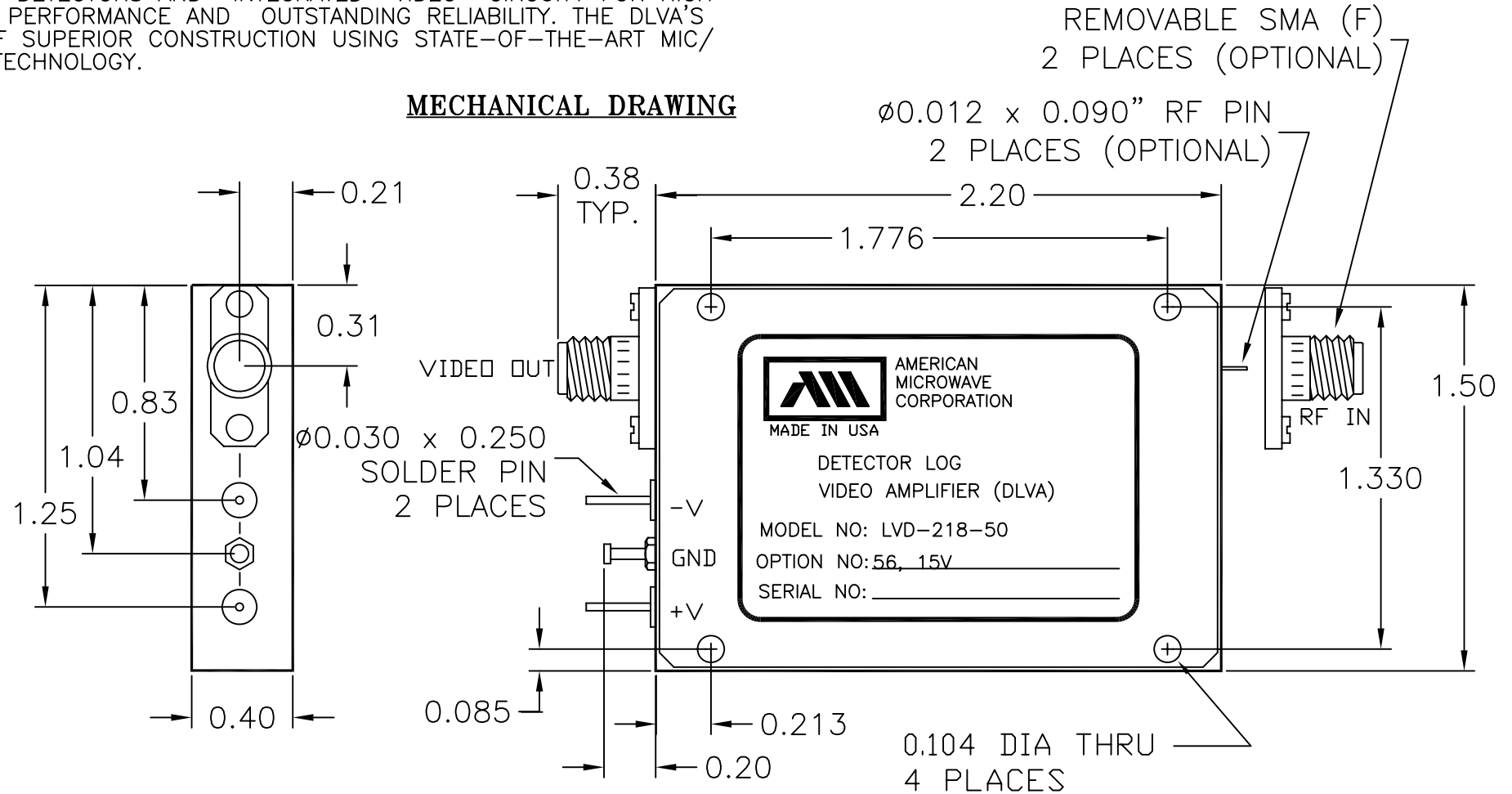
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION


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MECHANICAL DRAWING



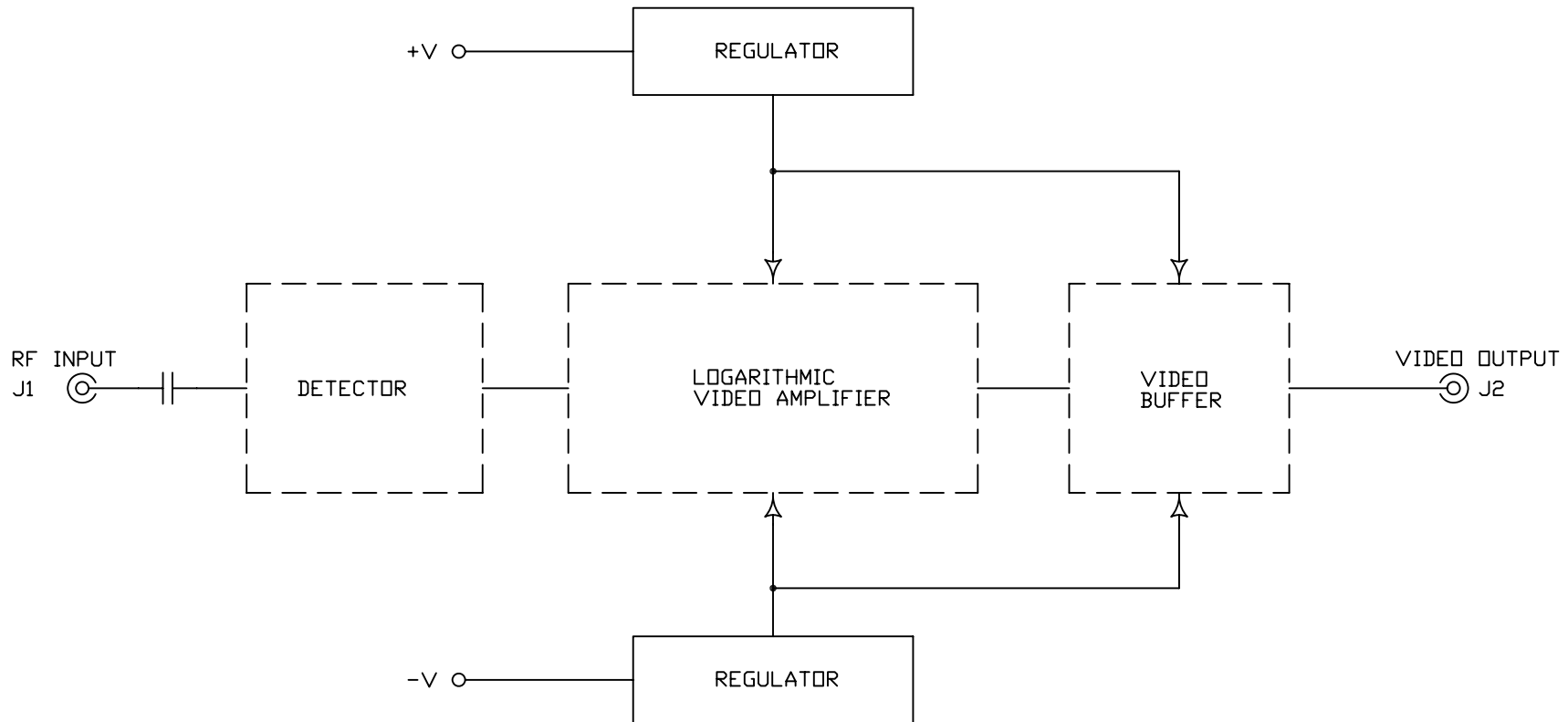
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DRAWN					
MODIFIED					
CHECKED					
		SIZE A	SHEET 2 OF 4	DWG. # 100-2811-8	REV B


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FUNCTIONAL BLOCK DIAGRAM



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APPROVALS	DATE	5 TO 6 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
DRAWN <i>PRB</i>	07/20/06	SIZE	A
MODIFIED <i>RA</i>	07/21/06	SHEET	3 OF 4
CHECKED		DWG. #	100-2811-8
			REV B