

DESCRIPTION

THE LVD-218-50 OPTION: HERM IS A HERMETICALLY SEALED 50 dB DETECTOR LOG VIDEO AMPLIFIER, OVER THE FULL 2 TO 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 @ -23 dB ±1.0dB MAXIMUM
- LOGGING RANGE -40 TO -0dBM MINIMUM
- USEFUL RANGE -40 TO +5dBM
- LOG LINEARITY 0 TO -40 dBm ±0.75dB MAXIMUM
- LOG SLOPE 50mV/dB
- OUTPUT LEVEL STABILITY ±0.75 dB MAXIMUM (0° TO +85°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME @ TSS +10 dB 20nS MAXIMUM
- RECOVERY TIME TO WITHIN 250nS MAXIMUM
±1 dB OF BASELINE
- TSS -42dBm MINIMUM
- VSWR (RF) 3:1 MAXIMUM
- VIDEO LOAD 100 OHMS
- DC POWER (NO LOAD)
 - +V 15V @ 95MA MAXIMUM
 - V 15V @ 60MA MAXIMUM
- SIZE 2.2" X 1.5" X 0.4"

AVAILABLE OPTIONS (SPECIFY)

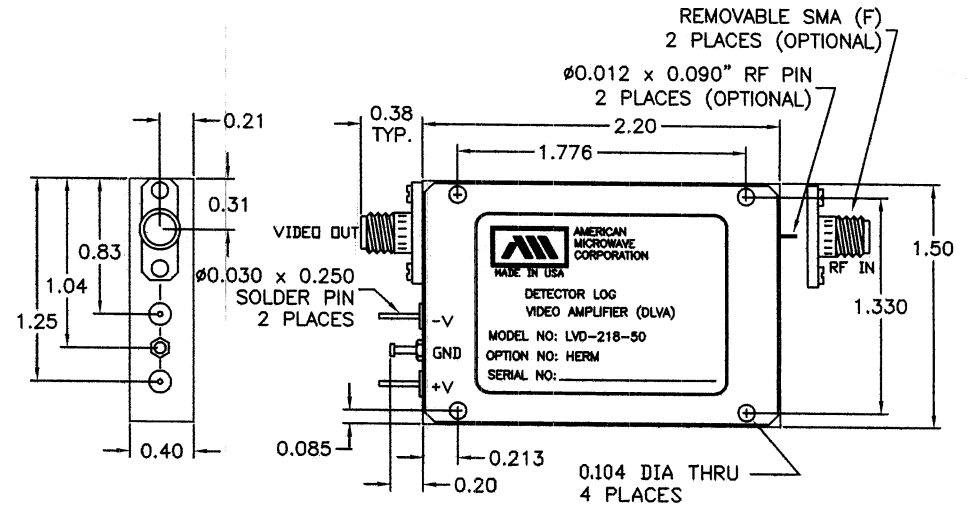
- A01 EXTENDED 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02 EXTENDED 0.5 TO 18 GHz RF FREQUENCY RANGE
- A03 FASTER RISE/RECOVERY TIMES
- A04 ALTERNATE LOG SLOPES
- A05 HIGH POWER RF CW/PEAK PROTECTION
- A06 EXTENDED LOGGING RANGE
- A07 OTHER VIDEO LOADS

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.010
X.XXX ±0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB # D307131PE	10/20/03	
A		SEE ECN# 04-119	08/31/04	

MECHANICAL OUTLINE



ENVIRONMENTAL RATINGS

- TEMPERATURE -54°C TO +85°C (OPERATING)
-65°C TO +100°C (STORAGE)
- HUMIDITY
- 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

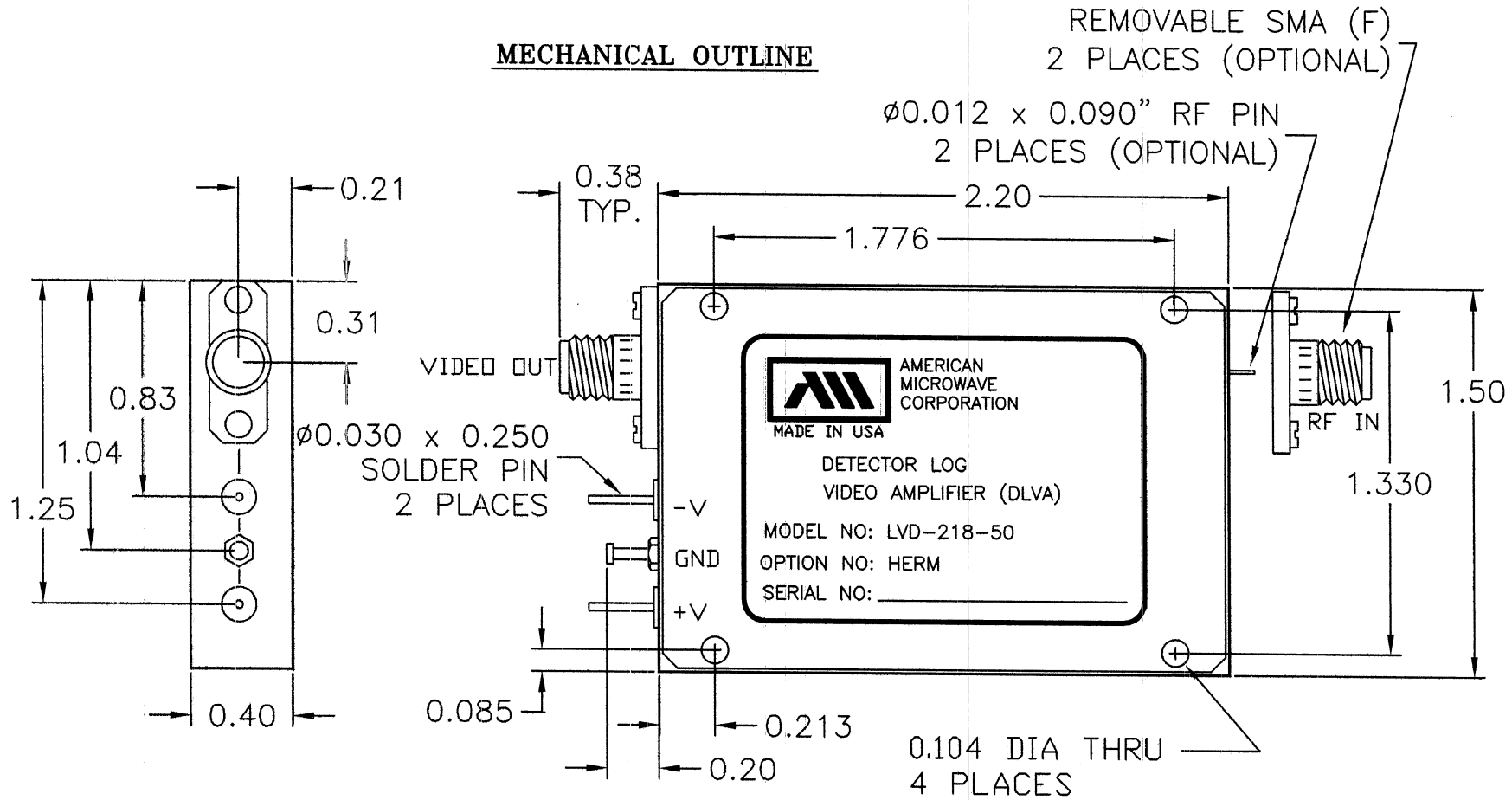
PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN <i>KAB</i>	10/20/03	PRODUCT FEATURE	
MODIFIED <i>878</i>	08/31/04	LVD-218-50 OPT. HERM DETECTOR LOG VIDEO AMPLIFIER	
CHECKED <i>A</i>	9/1/04	SIZE	FSCM NO.
ISSUED		A	60483
		DWG NO.	100-2811-7
		REV.	A
		SCALE	N:S
		SHEET	1 of 3

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MECHANICAL OUTLINE



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X.XX ±0.010
X.XXX ±0.005

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APPROVALS	DATE	TITLE		
DRAWN <i>KAB</i>	10/20/03	MECHANICAL OUTLINE		
MODIFIED <i>EFE</i>	08/31/04	LVD-218-50 OPT. HERM		
CHECKED <i>PA</i>	7/7/04	DETECTOR LOG VIDEO AMPLIFIER		
ISSUED		SIZE	FSCM NO.	DWG NO.
		A	60483	100-2811-7
		SCALE	N:S	SHEET 2 of 3