

# DESCRIPTION

AMC MODEL LVD-218-50 OPTION: T5985-0023-001 IS A 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 9 TO 10 GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

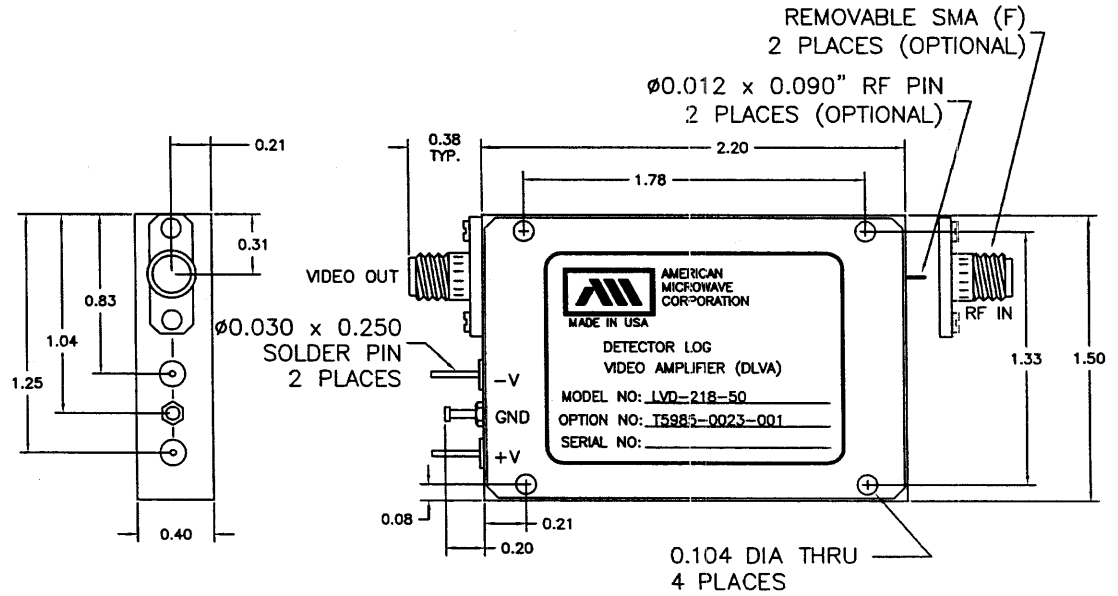
# SPECIFICATIONS

- FREQUENCY RANGE: ..... 9 TO 10 GHz
- FREQUENCY FLATNESS: ..... ± 1.0 dB MAXIMUM
- LOGGING RANGE: ..... -40 TO 0 dBm MINIMUM
- USEFUL RANGE: ..... -40 TO +5 dBm
- LOG LINEARITY ERROR: ..... ± 0.5 dB MAXIMUM
- LOG SLOPE: ..... 50 mV/dB
- LOG SLOPE ACCURACY: ..... ±4% OF AVERAGE SLOPE
- TEMPERATURE STABILITY: ..... ± 1.0 dB MAXIMUM (-54°C TO +85°C)
- RISE TIME: ..... 20 nSec MAXIMUM
- SETTLING: ..... 45 nSec MAXIMUM
- RECOVERY TIME: ..... 150 nSec TYPICAL  
300 nSec MAXIMUM
- TSS: ..... -42 dBm MINIMUM
- VSWR: ..... 3.0:1 MAXIMUM
- VIDEO OUTPUT LEVEL: ..... 0 TO 2.5 VOLTS (50 MINIMUM LOAD)
- DC POWER (NO LOAD)
  - +V: ..... +15V @ 75 mA MAXIMUM
  - V: ..... -15V @ 75 mA MAXIMUM
- SIZE: ..... 2.20" x 1.50" x 0.40"

# 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: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION



ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-		ORIGINAL RELEASE JOB# D411272	12/2/04	BSC

## AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-4700 FAX: 301-662-4938  
WEBSITE: [www.americanmicrowavecorp.com](http://www.americanmicrowavecorp.com)  
E-MAIL: [sales@americanmicrowavecorp.com](mailto:sales@americanmicrowavecorp.com)  
ISO 9001:2000 CERTIFIED



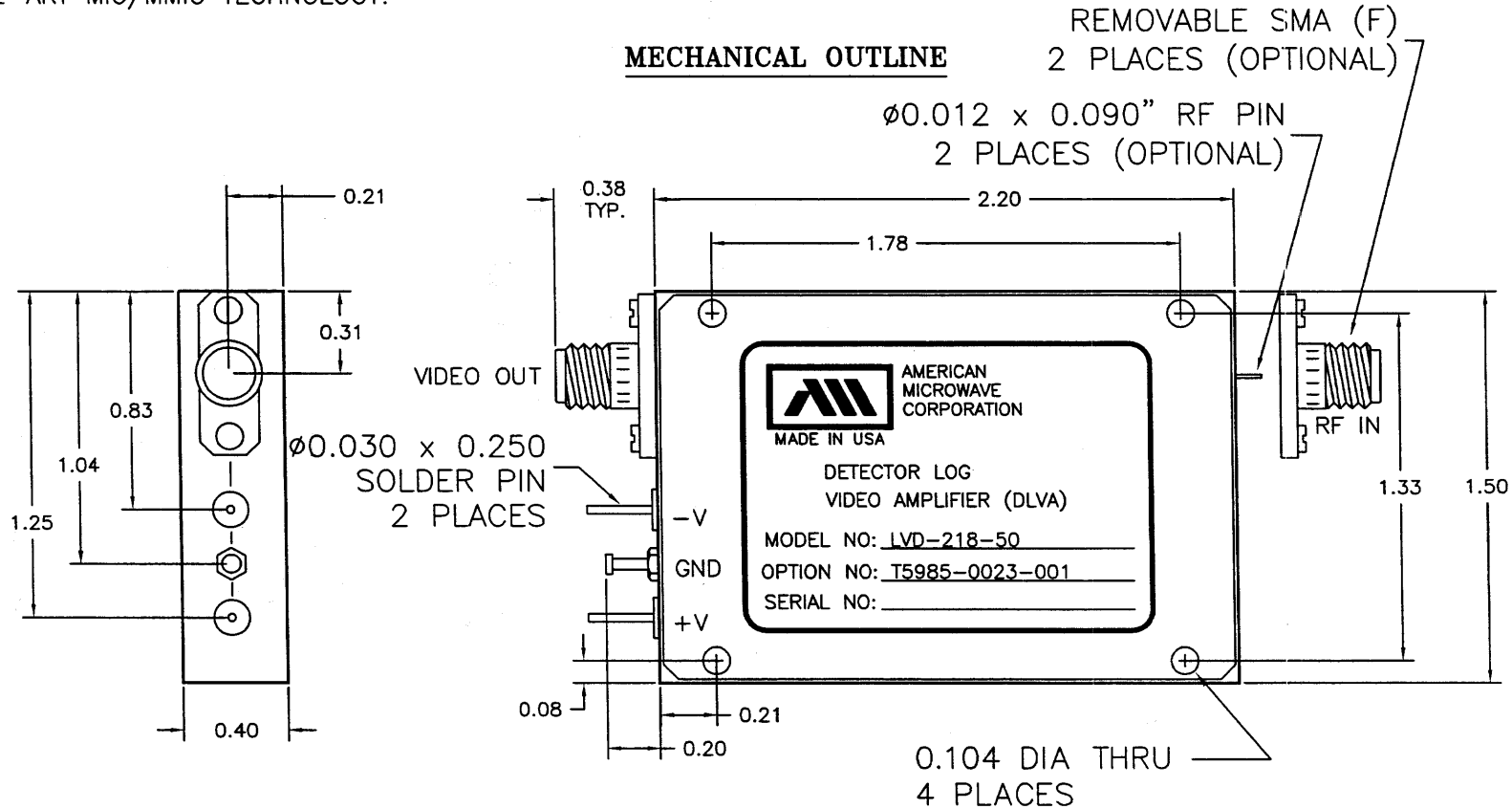
APPROVALS		DATE	TITLE			REV.
DRAWN <i>JDJ</i>		12/2/04	PRODUCT FEATURE LVD-218-50 OPTION: T5985-0023-001 9 - 10 GHz, DETECTOR LOG VIDEO AMPLIFIER			-
CHECKED <i>LA</i>		12/16/04	SIZE	FSCM NO.	DWG NO.	-
ISSUED			A	60483	100-7214	-
			SCALE	N:S		SHEET 1 OF 3

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## MECHANICAL OUTLINE



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 X.XXX ±0.010

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 FREDERICK, MARYLAND 21704 USA  
 TEL: 301-662-4700 FAX: 301-662-4938  
 WEBSITE: [www.americannmicrowavecorp.com](http://www.americannmicrowavecorp.com)  
 E-MAIL: [sales@americannmicrowavecorp.com](mailto:sales@americannmicrowavecorp.com)  
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APPROVALS		DATE	TITLE			REV.
DRAWN	<i>JDJ</i>	12/2/04	MECHANICAL OUTLINE LVD-218-50 OPTION: T5985-0023-001 9 - 10 GHz, DETECTOR LOG VIDEO AMPLIFIER			-
CHECKED	<i>PA</i>	12/16/04	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-7214	
			SCALE	N:S	SHEET	2 OF 3