

## DESCRIPTION

AMC MODEL LVD-218-50-HERM OPTIONS: 1042105, JB IS A HERMETICALLY SEALED 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED FOR USE OVER THE FULL 1.4 TO 21.5 GHz FREQUENCY RANGE WITH TRUE DC COUPLING.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 1.4 TO 21.5 GHz
- FREQUENCY FLATNESS
  - @ -23 dBm: ..... ± 1.5 dB MAXIMUM
- LOGGING RANGE: ..... -40 TO 3 dBm MINIMUM
- USEFUL RANGE: ..... -40 TO +5 dBm
- LOG LINEARITY
  - 0 TO -40 dBm: ..... ± 1.0 dB MAXIMUM
- LOG SLOPE: ..... 50 mV/dB ±10%
- OUTPUT LEVEL STABILITY: ..... ± 0.75 dB MAXIMUM (0°C TO +85°C)
- PULSE RESPONSE: ..... 50 nSec TO CW
- RISE TIME @ TSS +10 dB: ..... 20 nSec MAXIMUM
- RECOVERY TIME TO WITHIN ± 1 dB OF BASELINE: ..... 250 nSec MAXIMUM
- TSS: ..... -40 dBm MINIMUM
- VSWR (RF): ..... 3.0:1 MAXIMUM
- VIDEO LOAD: ..... 100 OHMS
- DC POWER (NO LOAD)
  - +V: ..... 8 TO 9 V @ 95 mA MAXIMUM
  - V: ..... 8 TO 9 V @ 60 mA MAXIMUM
- SIZE: ..... 2.2" x 1.5" x 0.4"

## OPTIONS:

- 1042105: ..... 1.4 TO 21.5 GHz FREQUENCY RANGE
- JB: ..... 8 TO 9 VOLTS SUPPLY

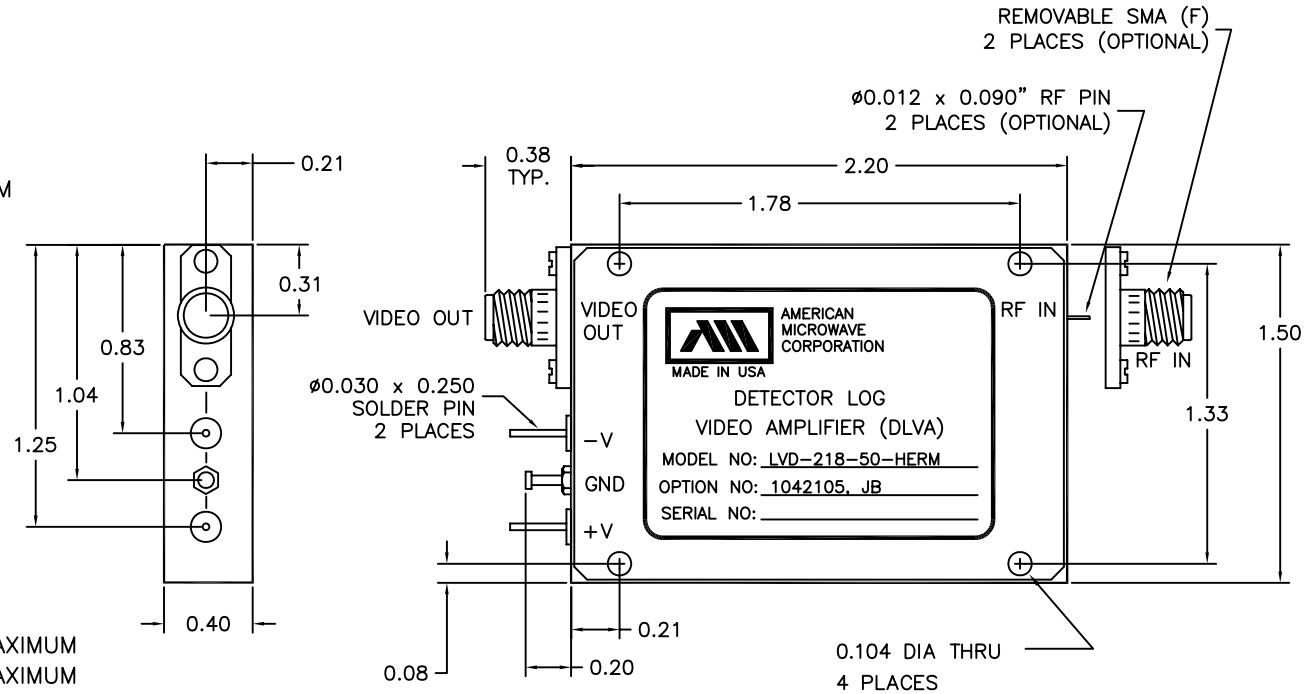
## ENVIRONMENTAL RATINGS:

- 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# D602044PE	5/3/06	



## AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED

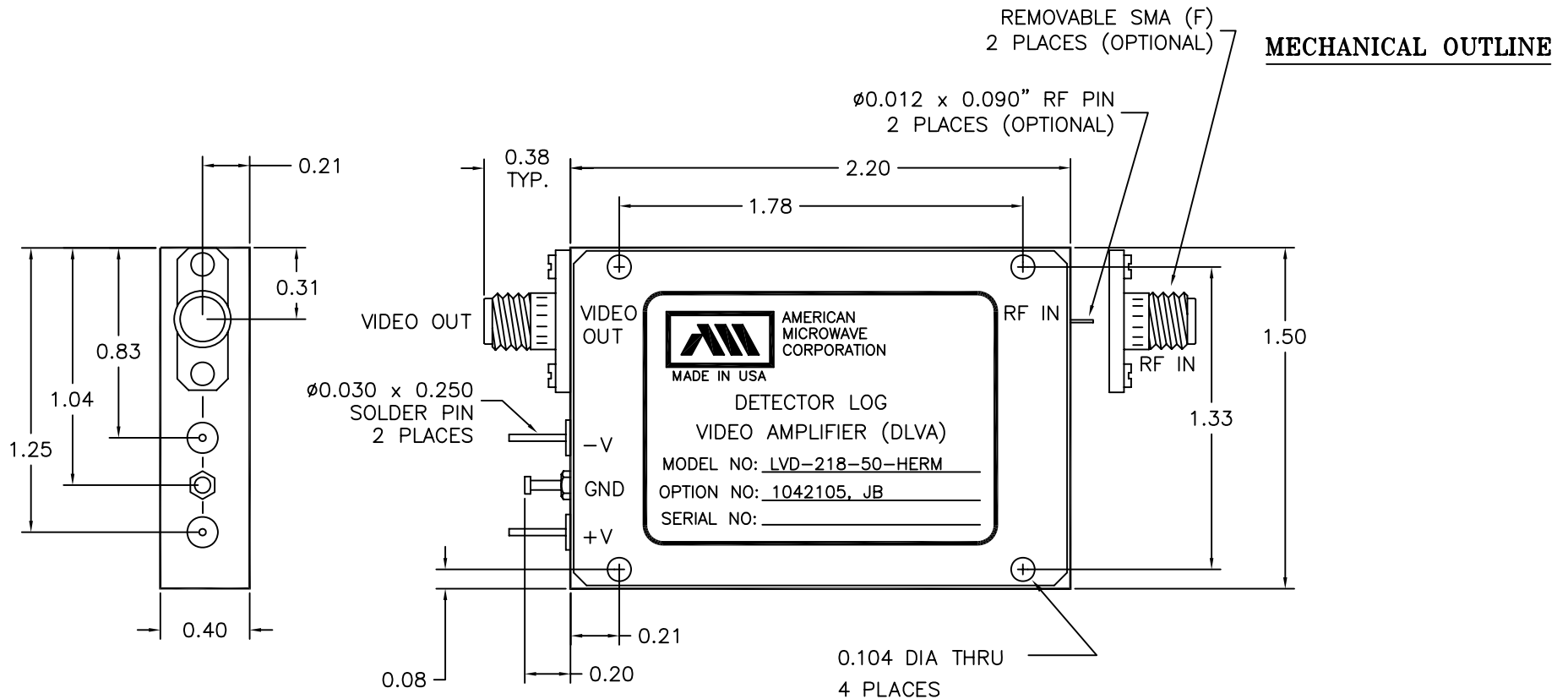


APPROVALS		DATE	TITLE		
DRAWN <i>JDJ</i>		5/3/06	PRODUCT FEATURE LVD-218-50-HERM OPTION: 1042105, JB 1.4-21.5 GHz DETECTOR LOG VIDEO AMPLIFIER		
CHECKED <i>RA</i>		4/2/07	SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7644
			SCALE	SHEET	
			N:S	1 OF 3	

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# D602044PE	5/3/06	



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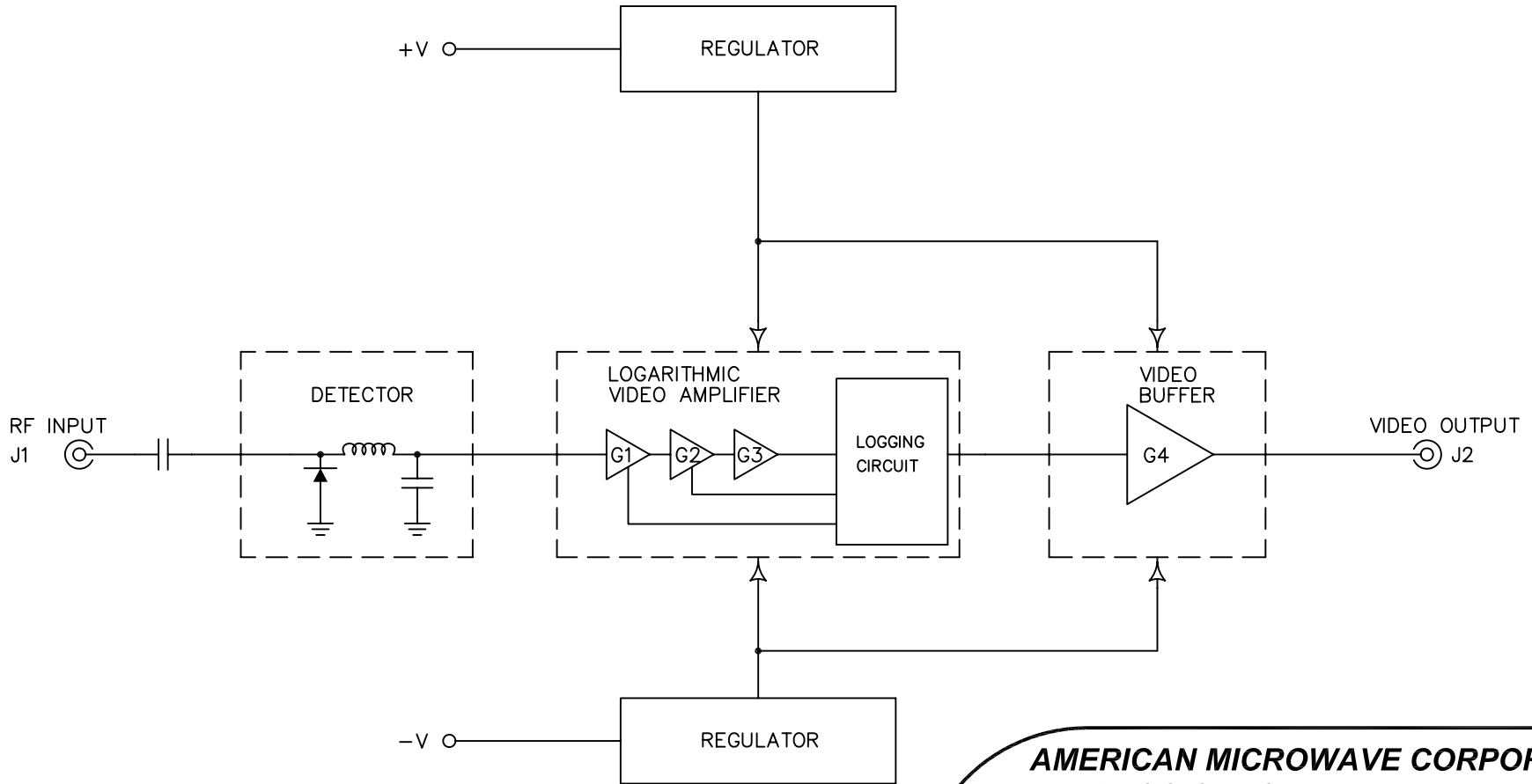
ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.010

APPROVALS		DATE	TITLE			REV.
DRAWN	<i>JDJ</i>	5/3/06	MECHANICAL OUTLINE LVD-218-50-HERM OPTION: 1042105, JB 1.4-21.5 GHz DETECTOR LOG VIDEO AMPLIFIER			-
CHECKED	<i>RA</i>	4/2/07	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-7644	
			SCALE	N:S		SHEET 2 OF 3

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# D602044PE SPACE SYSTEMS LORAL, CA	5/3/06	



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APPROVALS		DATE	TITLE			
DRAWN	<i>JDJ</i>	5/3/06	FUNCTIONAL SCHEMATIC LVD-218-50-HERM OPTION: 1042105, JB			
CHECKED	<i>RA</i>	4/2/07	SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	60483	100-7644	-
			SCALE	N:S	SHEET	3 OF 3