

DESCRIPTION

AMC MODEL LVD-218-50 OPTION: T5985-0023-002 IS A 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 15 TO 16 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.

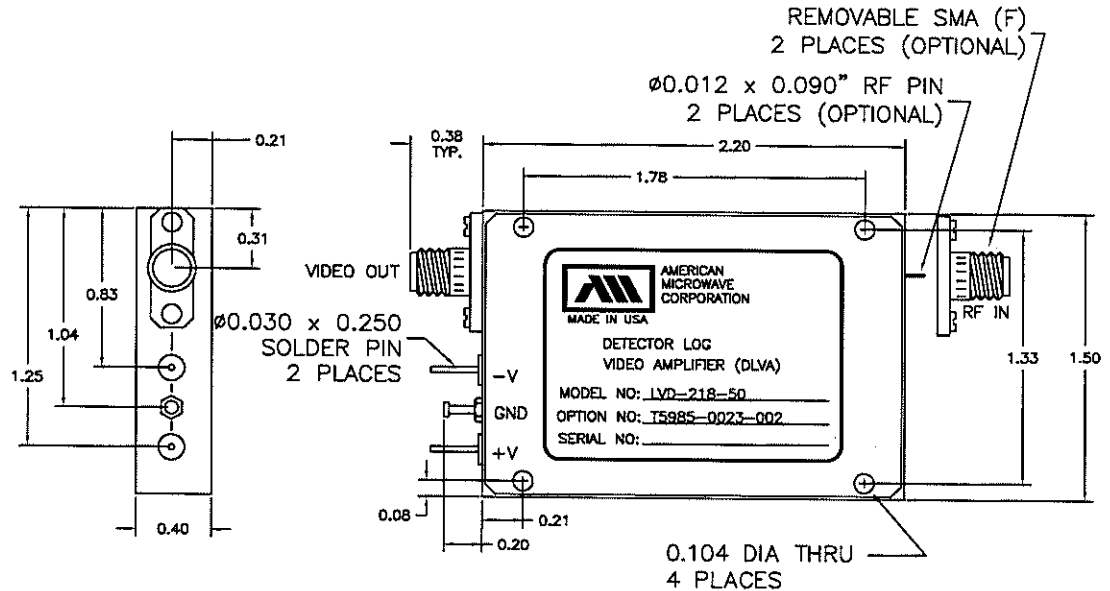
SPECIFICATIONS

- FREQUENCY RANGE: 15 TO 16 GHz
- FREQUENCY FLATNESS: ± 1.5 dB MAXIMUM
- LOGGING RANGE: -40 TO 0 dBm MINIMUM
- USEFUL RANGE: -40 TO +5 dBm
- LOG LINEARITY ERROR: ± 1.0 dB MAXIMUM (0.5dB TYP)
- LOG SLOPE: 50 mV/dB
- LOG SLOPE ACCURACY: $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY: ± 1.0 dB MAXIMUM (-40°C TO +60°C)
- RISE TIME: 20 nSec MAXIMUM
- SETTLING: 45 nSec MAXIMUM
- RECOVERY TIME: 150 nSec TYPICAL
200 nSec MAXIMUM
- TSS: -40 dBm MINIMUM
- VSWR: 2.5:1 MAXIMUM
- VIDEO OUTPUT LEVEL: 0 TO 2.5 VOLTS (50 MINIMUM LOAD)
- DC POWER (NO LOAD)
 - +V: +12V @ 120 mA MAXIMUM
 - V: -12V @ 80 mA MAXIMUM
- SIZE: 2.20" x 1.50" x 0.40"

ENVIRONMENTAL RATINGS

- **TEMPERATURE:** -40°C TO +60°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# D712247PEX	01/03/08	<i>[Signature]</i>

AMERICAN MICROWAVE CORPORATION

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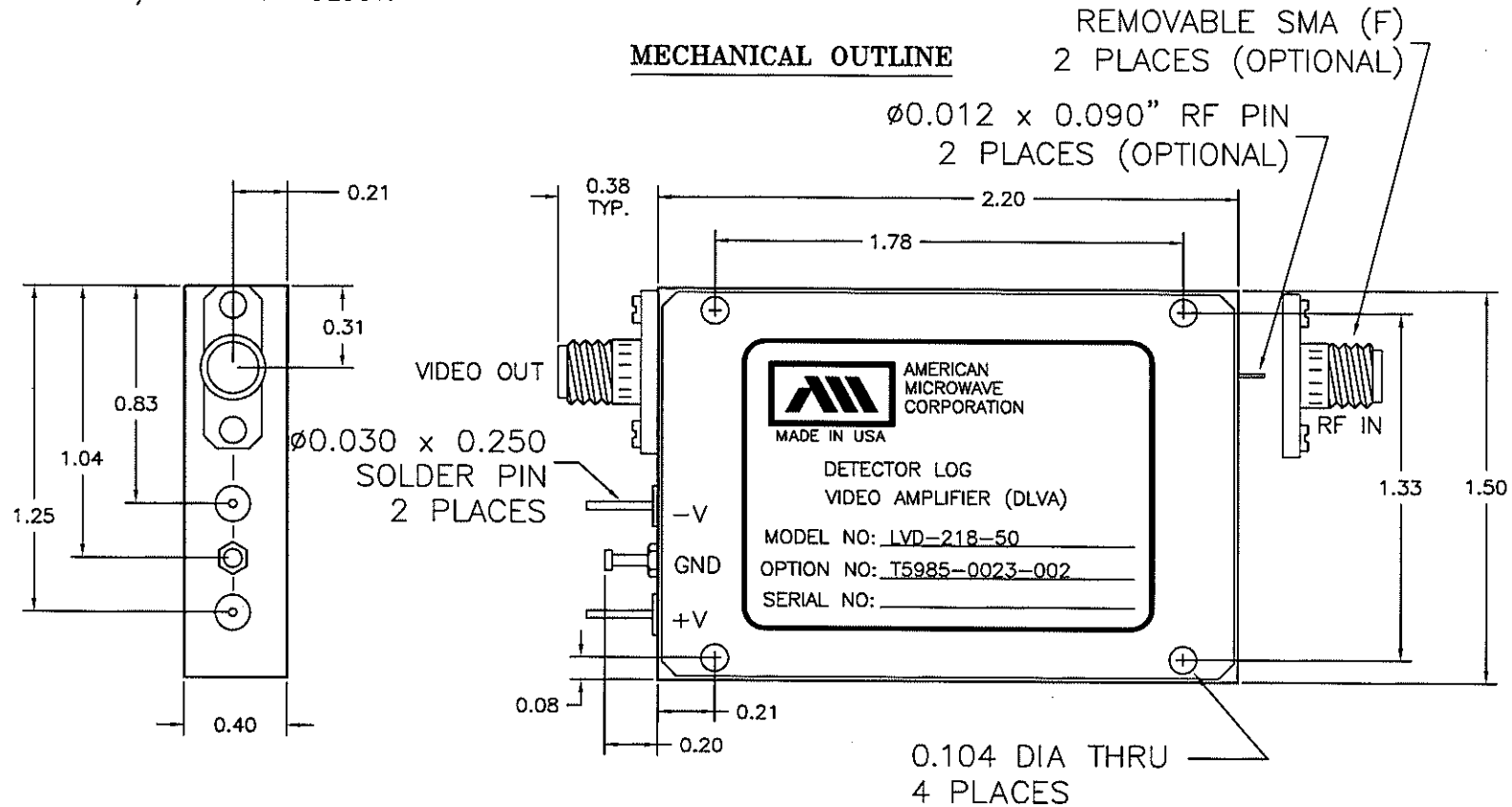


APPROVALS		DATE	TITLE			REV.
DRAWN	<i>[Signature]</i>	1/03/08	PRODUCT FEATURE LVD-218-50 OPTION: T5985-0023-002 15 - 16 GHz, DETECTOR LOG VIDEO AMPLIFIER			-
CHECKED	<i>[Signature]</i>	1/3/08	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-7214-2	
			SCALE	N:S		SHEET 1 OF 3

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MECHANICAL OUTLINE



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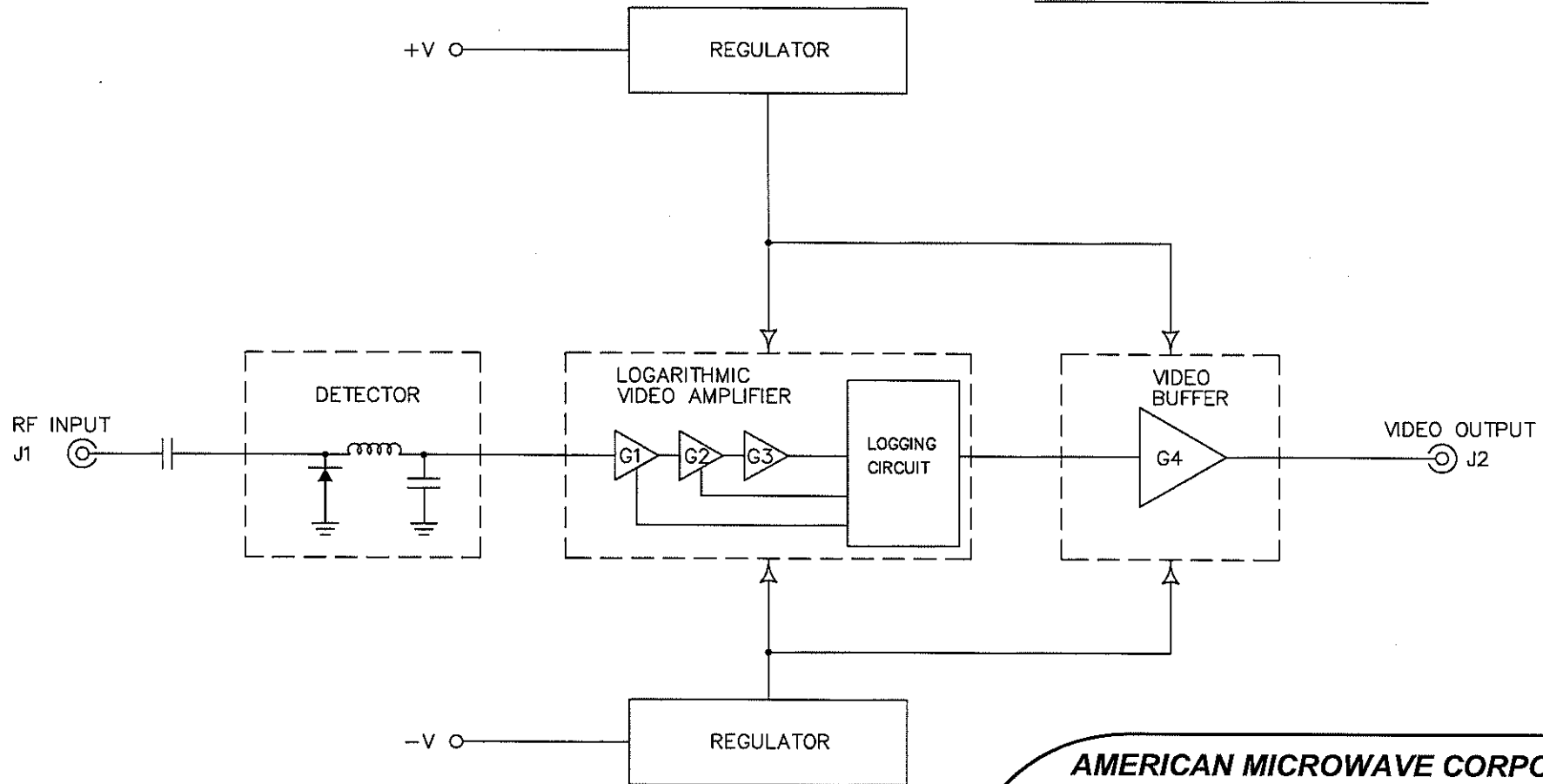
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 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010

APPROVALS		DATE	TITLE			
DRAWN <i>P.M.V.</i>		1/03/08	MECHANICAL OUTLINE LVD-218-50 OPTION: T5985-0023-002 15 - 16 GHz, DETECTOR LOG VIDEO AMPLIFIER			
CHECKED <i>K.L.S.</i>		1/3/08	SIZE	FSCM NO.	DWG NO.	REV.
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			SCALE N:S			SHEET 2 OF 3

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FUNCTIONAL BLOCK DIAGRAM



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APPROVALS		DATE	TITLE			
DRAWN	<i>P.M.D.</i>	1/03/08	FUNCTIONAL BLOCK DIAGRAM LVD-218-50			
CHECKED	<i>[Signature]</i>	1/13/08	OPTION: T5985-0023-002 15 - 16 GHz, DETECTOR LOG VIDEO AMPLIFIER			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	60483	100-7214-2	-
			SCALE	N:S	SHEET	3 OF 3