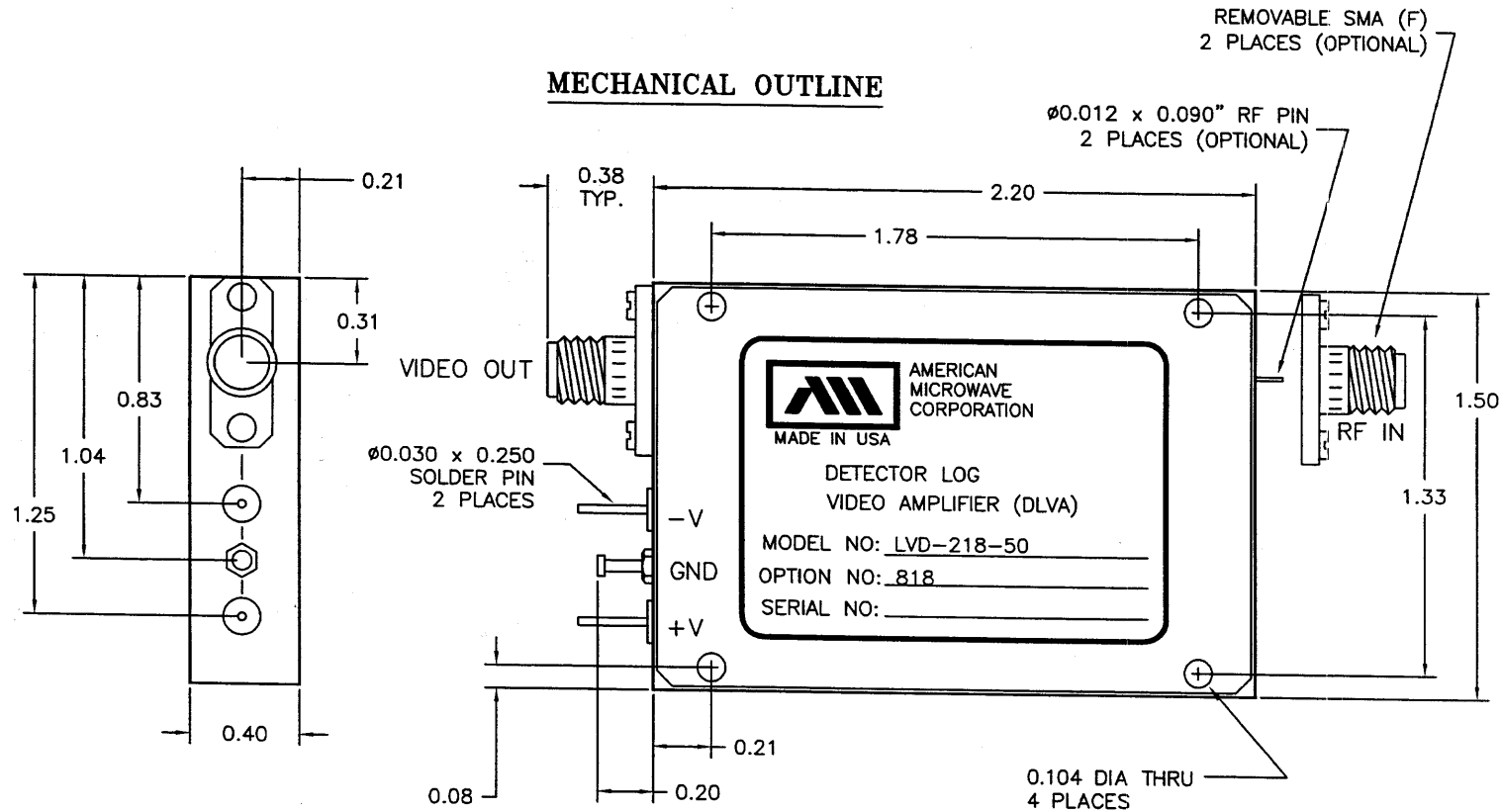


DESCRIPTION

AMC MODEL LVD-218-50 OPTION: 818 IS A 50 dB, DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE FULL 8 TO 18 GHz FREQUENCY RANGE WITH TRUE DC COUPLING. 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.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 410255	12/3/04	

MECHANICAL OUTLINE



AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
 TEL: 301-662-4700 FAX: 301-662-4938
 WEBSITE: www.americannmicrowavecorp.com
 E-MAIL: sales@americannmicrowavecorp.com
 ISO 9001:2000 CERTIFIED



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

APPROVALS		DATE	TITLE			REV.
DRAWN	<i>JDS</i>	12/3/04	MECHANICAL OUTLINE LVD-218-50 OPTION: 818 8 - 18 GHz, DETECTOR LOG VIDEO AMPLIFIER			-
CHECKED	<i>Pa</i>	12/16/04	SIZE	FSCM NO.	DWG NO.	
ISSUED			A	60483	100-7216	
			SCALE	N:S	SHEET	2 OF 3

DESCRIPTION

AMC MODEL LVD-218-50 OPTION: 818 IS A 50 dB, DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE FULL 8 TO 18 GHz FREQUENCY RANGE WITH TRUE DC COUPLING. 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.

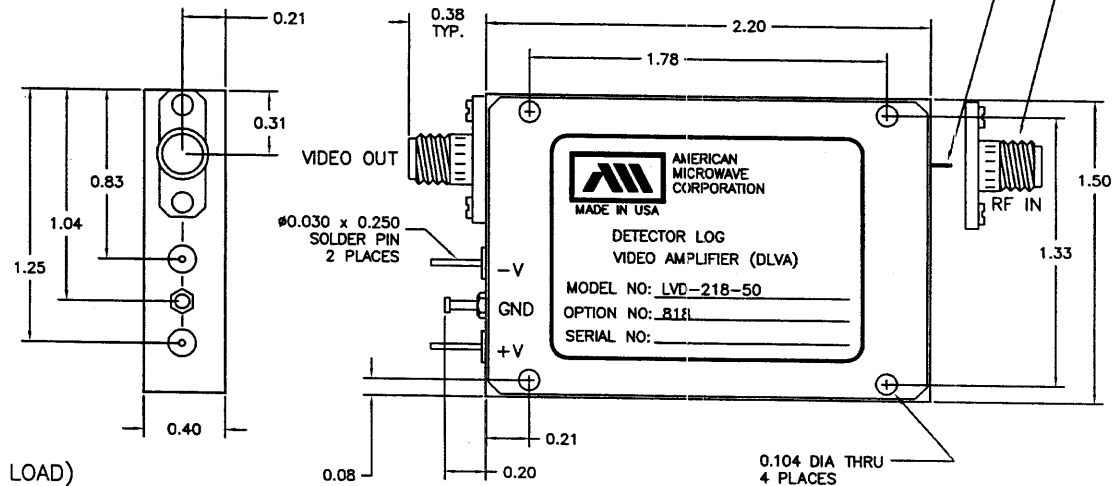
SPECIFICATIONS

- FREQUENCY RANGE: 8 TO 18 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
- LOG SLOPE: 50 mV/dB
- LOG SLOPE ACCURACY: $\pm 10\%$
- TEMPERATURE STABILITY: 0°C TO +60°C
- PULSE RESPONSE: 50 nSec TO CW
- RISE TIME: 20 nSec A=MAXIMUM
- SETTling TIME: 45 nSec MAXIMUM
- RECOVERY TIME: 250 nSec TYPICAL, 500 nSec MAXIMUM
- TSS: -40 dBm MINIMUM
- VSWR: 3.0:1
- MAXIMUM RF INPUT: +15 dBm
- VIDEO OUTPUT LEVEL: 0 TO 2.5 VOLTS TYPICAL (50 Ω MINIMUM LOAD)
- DC POWER WITH 100 Ω $\pm 10\%$ LOAD
 - +V: +12V @ 120 mA MAXIMUM
 - V: -12V @ 80 mA MAXIMUM

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



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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL RELEASE JOB# 410255	12/3/04	ESC

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APPROVALS		DATE	TITLE				REV.
DRAWN <i>JDJ</i>		12/3/04	PRODUCT FEATURE LVD-218-50 OPTION: 818 8 - 18 GHz, DETECTOR LOG VIDEO AMPLIFIER				-
CHECKED <i>[Signature]</i>		12/16/04	SIZE	FSCM NO.	DWG NO.		
ISSUED			A	60483	100-7216		
			SCALE	N:S	SHEET		1 OF 3