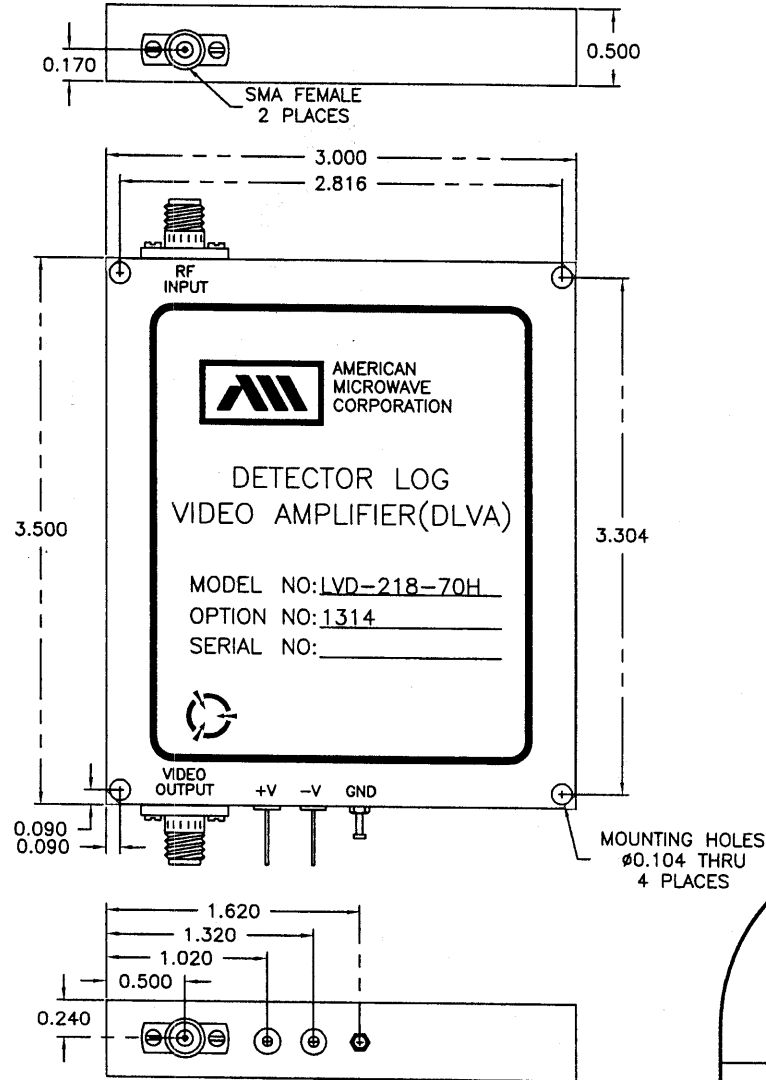


DESCRIPTION

AMC MODEL LVD-218-70H OPTION: 1314 IS A 70 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 13 TO 14 GHz BANDWIDTH, 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# 108148	9/15/04	PA



MECHANICAL OUTLINE

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010
 WEIGHT: 7.2 oz.
 UNIT IS EPOXY SEALED

AMERICAN MICROWAVE CORPORATION

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



APPROVALS		DATE	TITLE		
DRAWN	JDJ	9/15/04	MECHANICAL OUTLINE LVD-218-70H OPTION: 1314		
CHECKED	PA	9/21/04	13 TO 14 GHz, DETECTOR LOG VIDEO AMPLIFIER		
ISSUED			SIZE	FSCM NO.	DWG NO.
			A	60483	100-7120
SCALE N:S			SHEET		2 OF 3

DESCRIPTION

AMC MODEL LVD-218-70H OPTION: 1314 IS A 70 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 13 TO 14 GHz BANDWIDTH, 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.

FEATURES

- TRULY DC COUPLED
- WIDE BANDWIDTHS
- FAST RISE TIMES
- SHORT RECOVERY TIMES
- SUPERIOR ACCURACY
- EXTENDED DYNAMIC RANGE CAPABILITY
- MINIATURE SIZE
- 7.2 OZ WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE 13 TO 14 GHz
- FREQUENCY FLATNESS ± 1 dB MAXIMUM
- TSS -77 dBm MINIMUM
- VSWR 2.5:1 MAXIMUM
- DYNAMIC RANGE 40 dB MINIMUM
- LOGGING RANGE -40 TO -80dBm MAXIMUM
- LOG LINEARITY ± 5 dB MAXIMUM
- LOG SLOPE 200 mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY $\pm 5\%$ TYPICAL
- LOG TEMPERATURE STABILITY ± 1.75 dB MAXIMUM
- RISE TIME 50 nSec MAXIMUM
- RECOVERY TIME 250 nSec MAXIMUM TO WITHIN ± 1 dB OF BASELINE AFTER 1 μ Sec, 0 dBm INPUT PULSE APPLIED TO ISOLATOR
- VIDEO LOAD 75 OHMS
- DC POWER (NO LOAD)
 - +V 15V @ 350 mA MAXIMUM
 - V 15V @ 200 mA MAXIMUM
- SIZE 3.00" x 3.5" x 0.5"

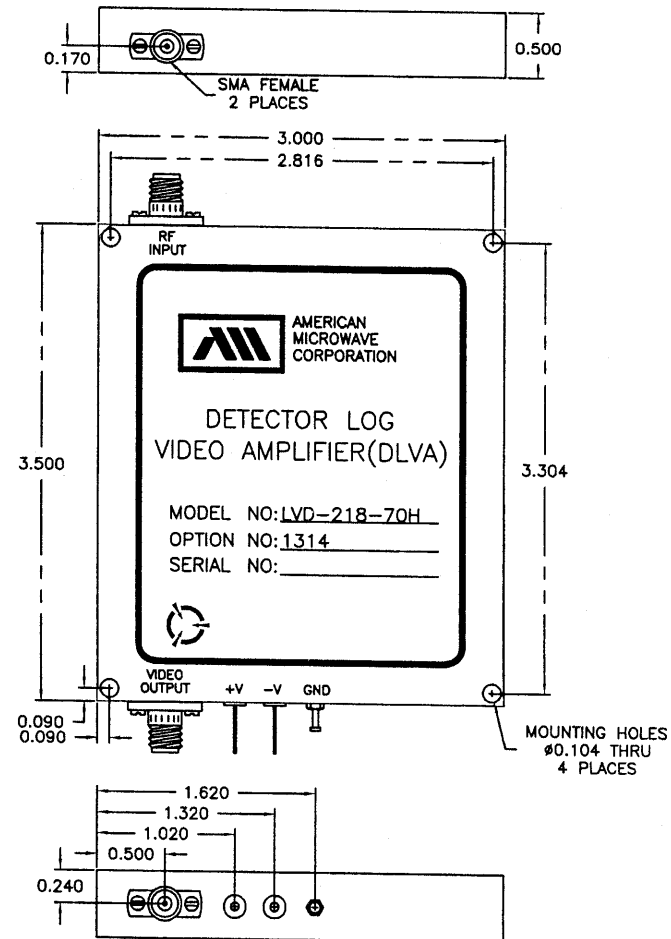
ENVIRONMENTAL RATINGS

- **TEMPERATURE:** -55°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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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 108148	9/15/04	AA



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APPROVALS		DATE	TITLE		
DRAWN	JDJ	9/15/04	PRODUCT FEATURE LVD-218-70H OPTION: 1314 13 TO 14 GHz, DETECTOR LOG VIDEO AMPLIFIER		
CHECKED	AA	9/21/04	SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7120
			SCALE	SHEET	
			N:S	1 OF 3	