

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 uSec, 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"

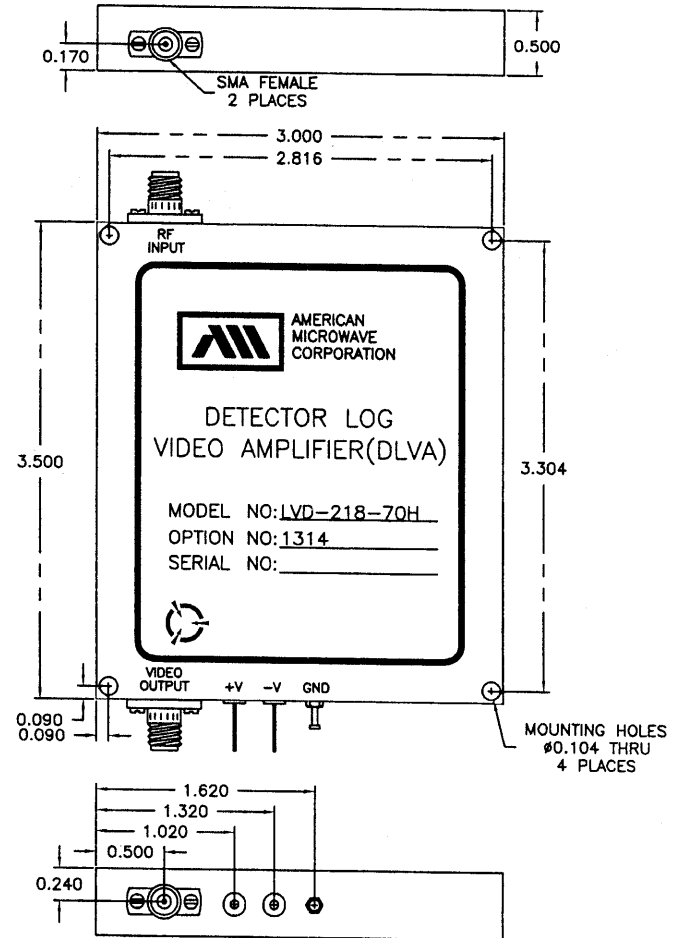
ENVIRONMENTAL RATINGS

- 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

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 108148	9/15/04	AA



AMERICAN MICROWAVE CORPORATION

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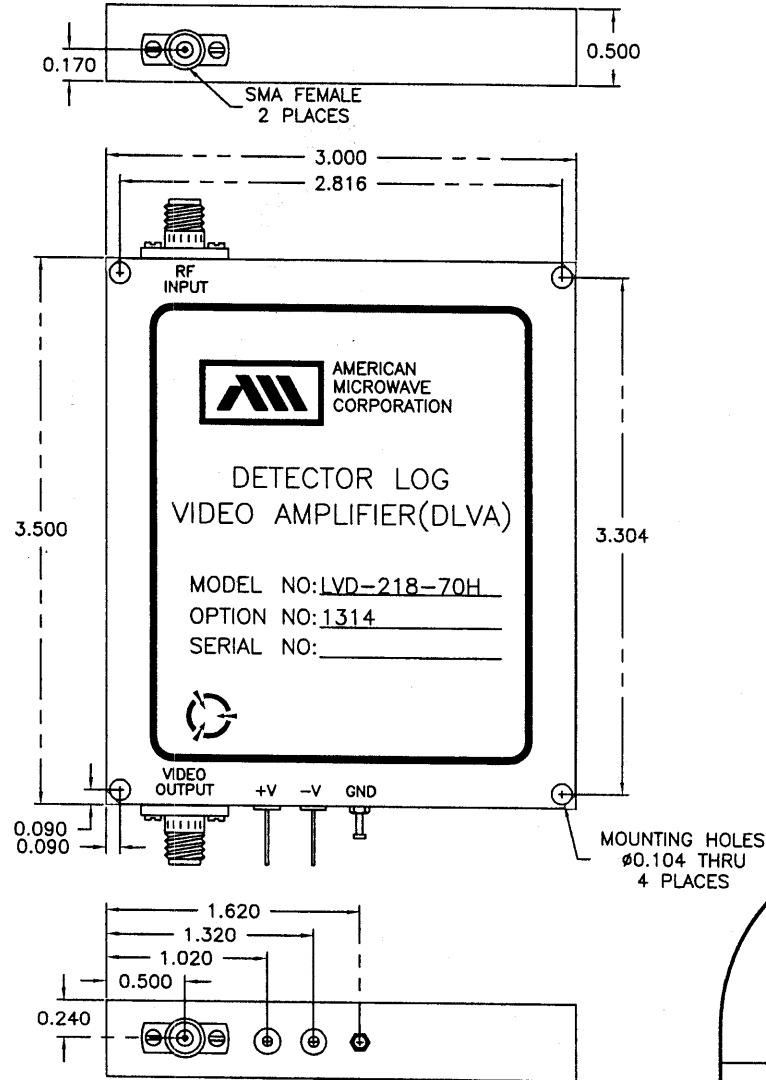


APPROVALS		DATE	TITLE			
DRAWN	JDJ	9/15/04	PRODUCT FEATURE LVD-218-70H OPTION: 1314 13 TO 14 GHz, DETECTOR LOG VIDEO AMPLIFIER			
CHECKED	AA	9/21/04	SIZE	PSOM NO.	DWG NO.	REV.
ISSUED			A	60483	100-7120	-
			SCALE	N:S		SHEET
					1 OF 3	

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REVISIONS				
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	-	ORIGINAL RELEASE JOB# 108148	9/15/04	PA



MECHANICAL OUTLINE

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 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010
 WEIGHT: 7.2 oz.
 UNIT IS EPOXY SEALED

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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		