

DESCRIPTION

THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN EXTENDED 70/75 dB AND STANDARD 50 dB DYNAMIC RANGE OVER THE FULL 1-18 GHz BANDWIDTH, WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY. THE SIZE IS 3.0" x 3.5" x 0.5".

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: 1 TO 18 GHz
- FREQUENCY FLATNESS: ±2.0 dB MAXIMUM
- TSS: -68 dBm TYPICAL
- VSWR: 3.0:1 MAXIMUM
- DYNAMIC RANGE: 75 dB TYPICAL
- LOGGING RANGE: -65 TO +5 dBm MINIMUM
- LOG LINEARITY: ±1.75 dB MAXIMUM
- LOG SLOPE: 50 mV/dB TYPICAL
- LOG SLOPE ACCURACY: ±10%
- LOG TEMPERATURE STABILITY: ±1.75 dB (0°C TO +60°C)
- RISE TIME: 30 nSec MAXIMUM, 20nSec TYPICAL
- RECOVERY TIME: 200 nSec TYPICAL, 350 nSec MAXIMUM
- VIDEO LOAD: 93 OHMS TYPICAL
- DC POWER (NO LOAD)
 - +V: 15V @ 350 mA MAXIMUM
 - V: 15V @ 200 mA MAXIMUM
- SIZE: 3.00" x 3.5" x 0.5"

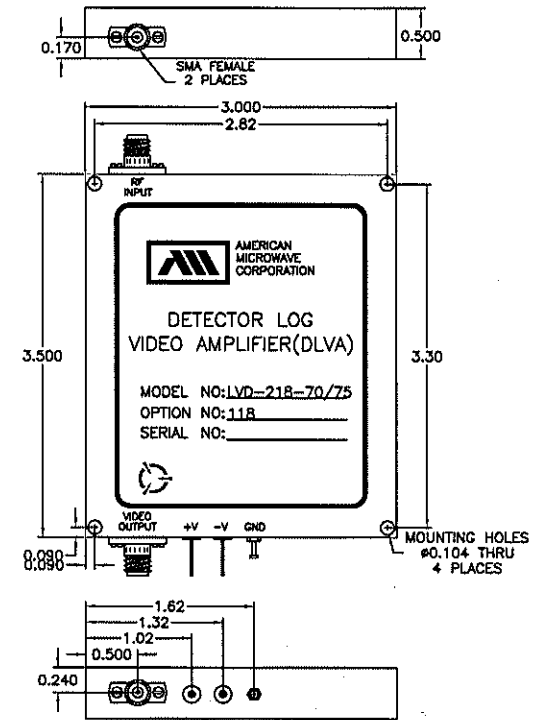
OPTIONS

- A01: EXTENDED 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02: EXTENDED 0.5 TO 18 GHz RF FREQUENCY RANGE
- A03: FASTER RISE/RECOVERY TIMES
- A04: ALTERNATE LOG SLOPES
- A05: HIGH POWER RF CW/PEAK PROTECTION
- A06: EXTENDED LOGGING RANGE
- A07: OTHER VIDEO LOADS

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	12/18/07	<i>[Signature]</i>



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

AMERICAN MICROWAVE CORPORATION

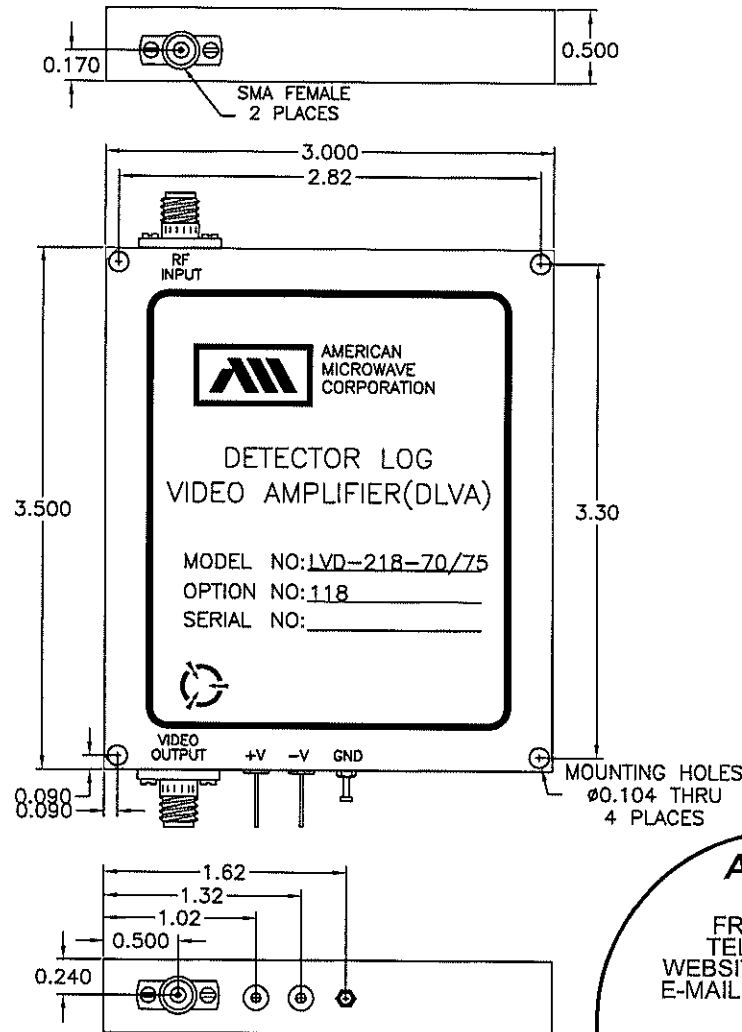
7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americamicrowavecorp.com
E-MAIL: sales@americamicrowavecorp.com
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE				REV.
DRAWN <i>WSP</i>		11/22/92	PRODUCT FEATURE LVD-218-70/75 OPT.118 1 TO 18 GHz, 70/75 dB TRULY DC COUPLED DETECTOR LOG VIDEO AMPLIFIER				-
REDRAWN <i>LDJ</i>		10/11/04	SIZE	FSCW NO.	DWG NO.		
ISSUED <i>[Signature]</i>		12/18/07	A	60483	100-2827-4		
SCALE N:S						SHEET 1 OF 3	

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THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN EXTENDED 70/75 dB AND STANDARD 50 dB DYNAMIC RANGE OVER THE FULL 2-18 GHz BANDWIDTH, WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY. THE SIZE IS 3.0" x 3.5" x 0.5".



MECHANICAL OUTLINE

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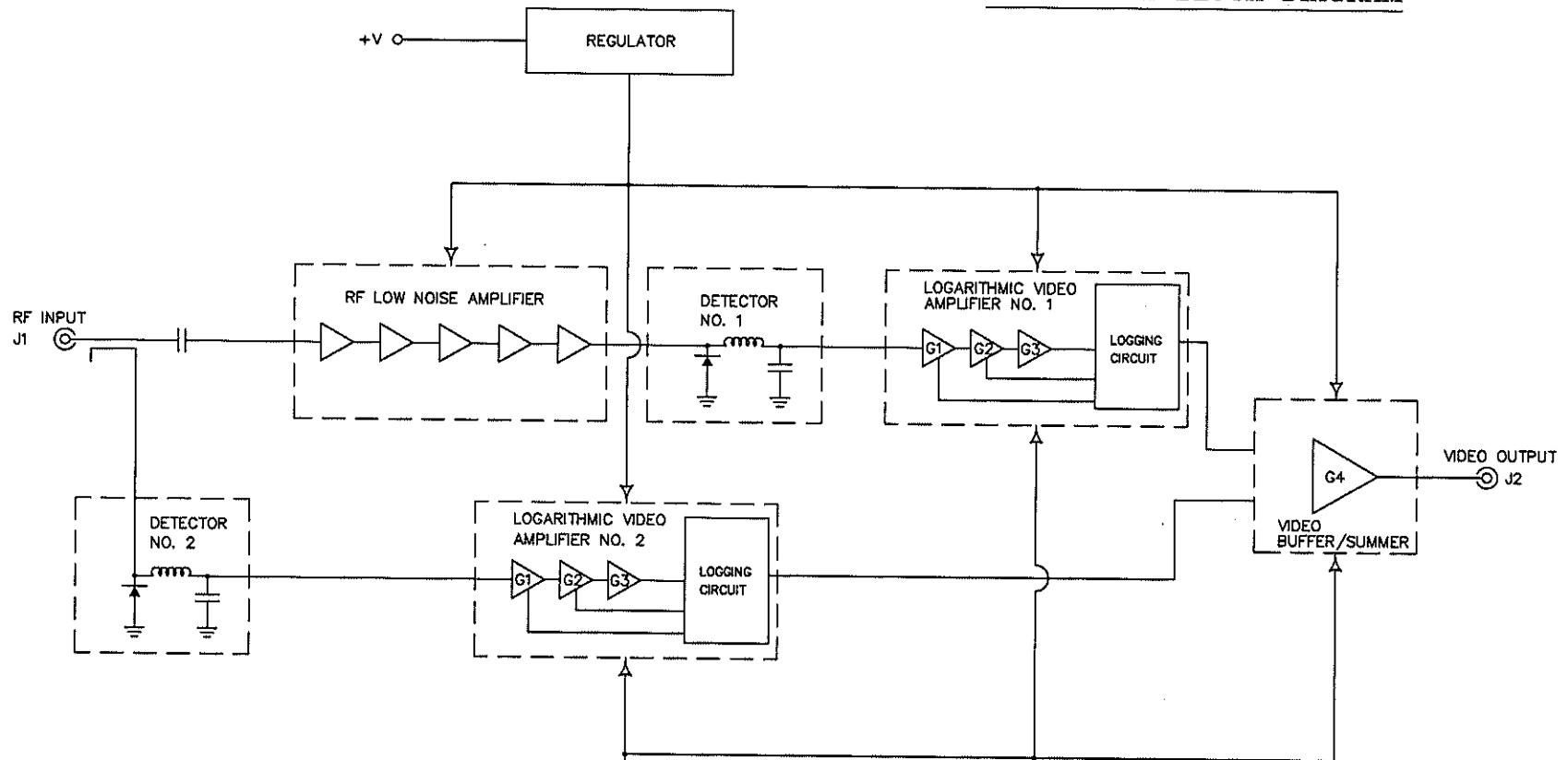
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010

APPROVALS		DATE	TITLE			REV.
DRAWN	WSP	11/22/92	MECHANICAL OUTLINE			
REDRAWN	JDS	10/11/04	LVD-218-70/75 OPT.118			
ISSUED	UK	12/8/04	1 TO 18 GHz, 70/75 dB TRULY DC COUPLED DETECTOR LOG VIDEO AMPLIFIER			
			SIZE	FSCM NO.	DWG NO.	
			A	60483	100-2827-4	
			SCALE	N:S	SHEET	2 OF 3

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FUNCTIONAL BLOCK DIAGRAM



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APPROVALS		DATE	TITLE			REV.
DRAWN	WSP	11/22/92	FUNCTIONAL BLOCK DIAGRAM			—
REDRAWN	JDF	10/11/04	LVD-218-70/75 OPT.118			—
ISSUED	lb	2/19/07	SIZE	FSCM NO.	DWG NO.	—
			A	60483	100-2827-4	—
			SCALE	N:S	SHEET	3 OF 3