

## DESCRIPTION

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".

## FEATURES

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

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 2 TO 18 GHz
- FREQUENCY FLATNESS: .....  $\pm 2.5$  dB MAXIMUM
- TSS: ..... -68 dBm TYPICAL
- VSWR: ..... 2.5:1 MAXIMUM
- DYNAMIC RANGE: ..... 75 dB TYPICAL
- LOGGING RANGE: ..... -65 TO +10 dBm MINIMUM
- LOG LINEARITY: .....  $\pm 1.75$  dB MAXIMUM
- LOG SLOPE: ..... 50 mV/dB TYPICAL
- LOG SLOPE ACCURACY: .....  $\pm 10\%$
- LOG TEMPERATURE STABILITY: .....  $\pm 2.0$  dB (0° C TO +60° C)
- RISE TIME: ..... 30 nSec MAXIMUM, 20nSec TYPICAL
- RECOVERY TIME: ..... 200 nSec TYPICAL, 300 nSec MAXIMUM
- VIDEO LOAD: ..... 100 OHMS TYPICAL, OR AS DESIRED
- DC POWER (NO LOAD)
  - +V: ..... 9 TO 18V @ 350 mA MAXIMUM
  - V: ..... 9 TO 18V @ 200 mA MAXIMUM

## OPTIONS

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

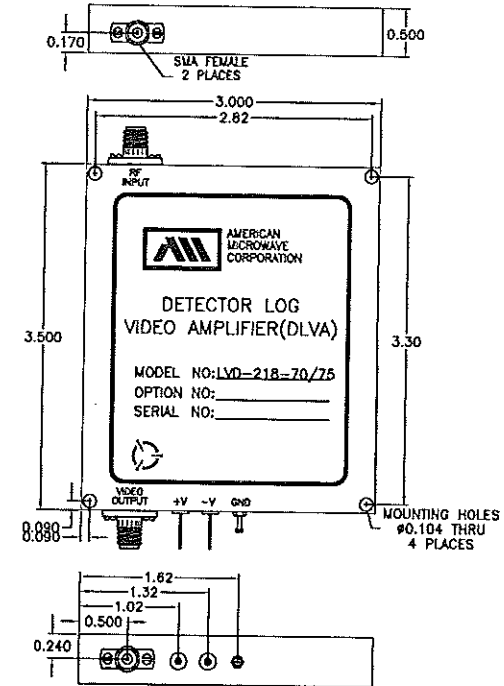
NOTE: THE ABOVE SPECIFICATION ARE SUBJECT TO CHANGE OR REVISION.

\* Units are designed to meet Environmental ratings but not tested. If Environmental Testing is required, please contact Sales Department.

ALL DIMENSIONS ARE IN INCHES

TOLERANCES:  
X.XX  $\pm 0.020$   
X.XXX  $\pm 0.010$

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 306129	11/22/92	
	B	SEE ECR# 08-047	7/3/08	
	C	SEE ECR# 09-025	6/3/09	UK



## ENVIRONMENTAL RATINGS

- TEMPERATURE: ..... 0°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

## AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN WSP		11/22/92	PRODUCT FEATURE		
REDRAWN JDF		10/11/04	LVD-218-70/75		
ISSUED UK		6/10/09	2 TO 18 GHz, 70/75 dB TRULY DC COUPLED DETECTOR LOG VIDEO AMPLIFIER		
SIZE	FSCM NO.	DWG NO.	REV.		
A	60483	100-2827	C		
SCALE N:S		SHEET		1 OF 3	