

LVD-218-70(OPTION 15) DLVA WITH POSITIVE AND NEGATIVE COMPLIMENTARY OUTPUTS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE JOB# 30364	07/24/93	<i>[Signature]</i>

DESCRIPTION

THE LVD-218 SERIES DLVA'S ARE AVAILABLE IN EXTENDED 70/75dB DYNAMIC RANGE OVER THE RANGE OF 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
- 7.2 OZ WEIGHT

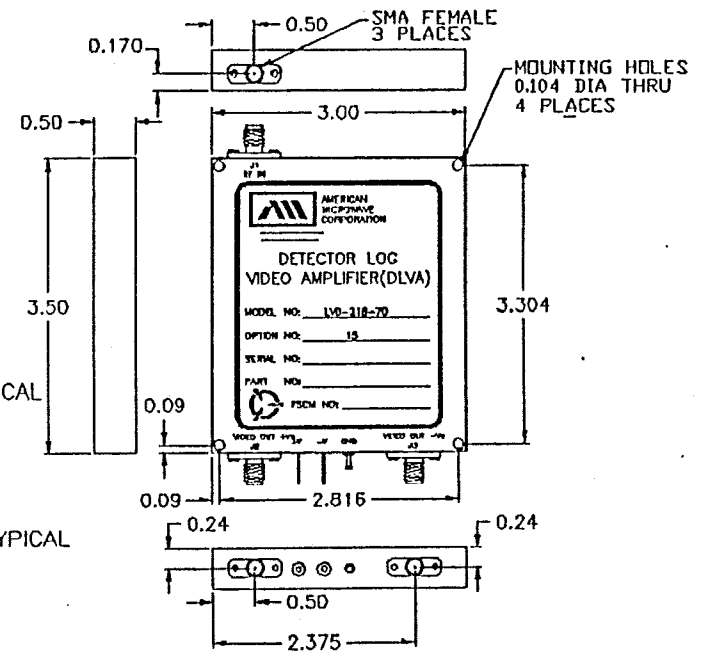
SPECIFICATIONS

- FREQUENCY RANGE 15 GHz \pm 0.5 GHz
- FREQUENCY FLATNESS \pm 1.50dB MAXIMUM (15GHz \pm 0.5GHz), \pm 1.0dB TYPICAL
- TSS -80dBm (15 GHz \pm 0.5 GHz)
- VSWR 2.5:1 MAXIMUM (@ -20dBm, 15GHz \pm 0.5GHz), 2.0:1 TYPICAL
- LOGGING RANGE -75 dBm TO -30dBm
- LOG LINEARITY \pm 2.5dB MAXIMUM (-75dBm TO -30dBm), 1.5dB TYPICAL
- LOG SLOPE (POSITIVE) 50mV/dB (\pm 10% TOLERANCE IN 75 OHM LOAD)
- LOG SLOPE (NEGATIVE) 50mV/dB (\pm 10% TOLERANCE IN 75 OHM LOAD)
- LOG SLOPE ACCURACY \pm 5% MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY \pm 2.5dB (0°C TO 60°C), \pm 1.5dB TYPICAL
- RISE TIME (10% TO 90% POINTS) 50ns TYPICAL
- RECOVERY TIME 250ns TYPICAL (-80 TO -40 dBm)
- OUTPUT VIDEO SOURCE IMPEDANCE 75 OHMS \pm 10% TOLERANCE
- DC POWER (NO LOAD)
 - +V 9 TO 18V @ 250mA MAXIMUM
 - V 9 TO 18V @ 100mA MAXIMUM
- SIZE 3.00" x 3.5" x 0.5"

AVAILABLE OPTIONS (SPECIFY)

- A01 ANY FREQUENCY VALUE IN THE 0.2 TO 20 GHz RANGE
- A02 \pm 1dB FREQUENCY FLATNESS AT ANY FREQUENCY IN THE 0.2 TO 20 GHz 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
- A08 OTHER RF BANDWIDTH
- A09 LOG LINEARITY OF \pm 1.5dB MAXIMUM


MECHANICAL OUTLINE



- NOTES:
1. DIMENSIONS ARE IN INCHES
 2. TOLERANCES: X.XX \pm 0.020
X.XXX \pm 0.010
7.2 OZ
 3. WEIGHT: 7.2 OZ
 4. UNIT IS EPOXY SEALED

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

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APPROVALS		DATE	
DRAWN <i>Rd</i>		07/24/93	
CHECKED		PRODUCT FEATURE LVD-218-70/75 (OPTION 15) 15GHz \pm 0.5GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER WITH INVERTING(NEGATIVE) AND NON-INVERTING(POSITIVE) VIDEO OUTPUTS	