

DESCRIPTION

THE LVDM-218-70/75 SERIES MINIATURE DLVA'S ARE AVAILABLE IN EXTENDED 70/75dB AND STANDARD 70 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 3.4" x 1.75" x 0.5"

FEATURES

- TRULY DC COUPLED
- WIDE BANDWIDTHS
- FAST RISE TIMES
- SHORT RECOVERY TIMES
- SUPERIOR ACCURACY
- EXTENDED DYNAMIC RANGE CAPABILITY
- MINIATURE SIZE
- ≤ 4.0 OZ WEIGHT

SPECIFICATIONS

- FREQUENCY RANGE 2 TO 18 GHz
- FREQUENCY FLATNESS ±1.75 (±1.5dB 6-18 GHz)
- TSS -68dBm (-70dBm 6-18 GHz)
- VSWR 2.5:1
- DYNAMIC RANGE 80dB
- LOGGING RANGE -70 TO +10dBm
- LOG LINEARITY ±1.75dB (±1.5dB 6-18 GHz)
- LOG SLOPE 50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY ±5% MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY ±1.75dB (±1.5dB 6-18 GHz)
- RISE TIME 30nS MAXIMUM, 20nS TYPICAL
- RECOVERY TIME 200nS TYPICAL, 300nS MAXIMUM
- VIDEO LOAD 100 OHMS (TYPICAL)
- DC POWER (NO LOAD)
 - +V 15V @ 350mA
 - V 15V @ 200mA MAXIMUM
- SIZE 3.4" x 1.75" x 0.5"

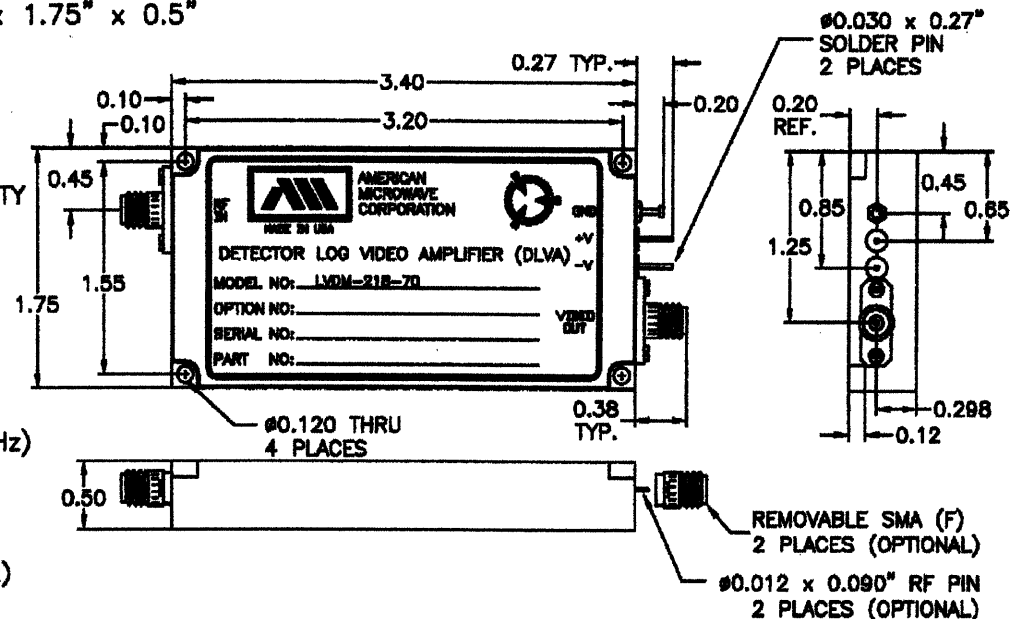
AVAILABLE OPTIONS (SPECIFY)

- 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: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS			DATE	APPROVED
ZONE	REV	DESCRIPTION		
		ORIGINAL RELEASE	1/27/98	

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ±0.020
X.XXX ±0.010
- 3) WEIGHT: ≤4.0 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

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938	
		PRODUCT FEATURE LVDM-218-70/75 2 TO 18 GHz, 70/75 dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DESIGNED <i>WYP</i>	1/27/98		
CHECKED			
		S77 A	SHEET 1 OF 2 DWG. # 100-4988