

DESCRIPTION

THE LVDM-218-70/75 SERIES MINIATURE DLVA'S ARE AVAILABLE IN EXTENDED 70/75 dB AND STANDARD 70dB DYNAMIC RANGE OVER THE FULL 0.5-18 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 0.5 TO 18 GHz
- FREQUENCY FLATNESS ±2.0dB TYPICAL (±2.5dB MAXIMUM)
- TSS -68dBm (-70dBm 6-18 GHz)
- VSWR 3.0:1 MAXIMUM (2.5:1 TYPICAL)
- DYNAMIC RANGE 80dB
- LOGGING RANGE -70 TO +10dBm
- LOG LINEARITY ±1.75dB
- LOG SLOPE 50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY ±5% MAXIMUM OF AVERAGE SLOPE
- LOG TEMPERATURE STABILITY ±1.5dB (0°C TO 60°C)
- RISE TIME 30nS MAXIMUM, 20nS TYPICAL
- RECOVERY TIME 250nS TYPICAL, 350nS MAXIMUM
- VIDEO LOAD 50 OHMS (TYPICAL), OR AS DESIRED
- DC POWER (NO LOAD)
 - +V 15V @ 350mA TYPICAL, 375mA MAXIMUM
 - V 15V @ 200mA MAXIMUM
 - OTHER VOLTAGES AVAILABLE
- SIZE 3.4" x 1.75" x 0.5"

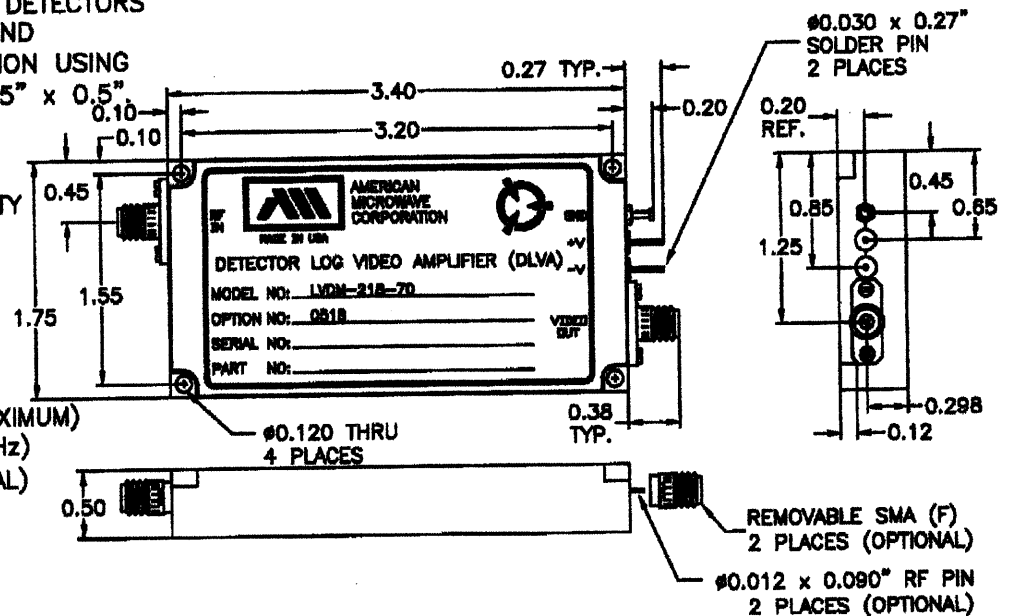
AVAILABLE OPTIONS (SPECIFY)

- A01 EXTENDED 0.2 TO 20 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
- A08 -54°C TO +85°C WITH LOG TEMPERATURE STABILITY OF ±1.75dB

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ZONE		REV.	DESCRIPTION	DATE	APPROVED
			ORIGINAL RELEASE	2/2/88	


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 (OPTION 0518) 0.5 TO 18 GHz, 70/75dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE	SIZE	SHEET 1 OF 2
DRAWN <i>WSP</i>	2/2/88		DWG. # 100-4308