

DESCRIPTION

AMC MODEL LVD-218-40/45 IS A DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE 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.

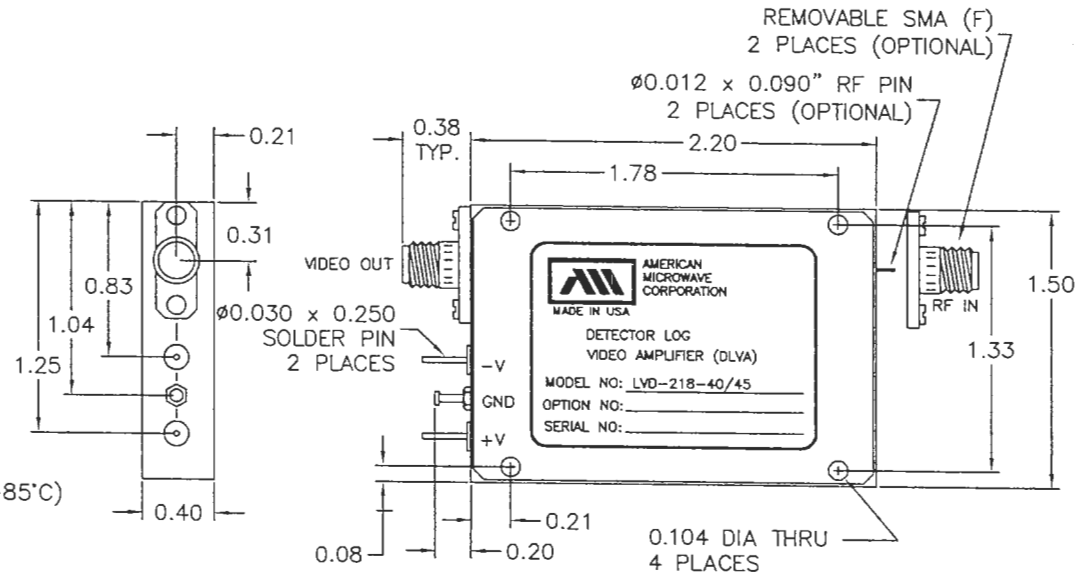
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# D406107	07/06/04	

FEATURES

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

SPECIFICATIONS

- FREQUENCY RANGE 2 TO 18 GHz
- FREQUENCY FLATNESS ± 1.5 dB MAXIMUM
- LOGGING RANGE -40 TO -0dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ± 0.5 dB TYPICAL (ROOM TEMP)
 ± 1.0 dB AVE (-54° TO +85°C)
- LOG SLOPE 50mV/dB
- LOG SLOPE ACCURACY $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54° TO +85°C)
- PULSE RESPONSE 50nS TO CW
- RISE TIME 20nS MAXIMUM
- SETTling TIME 45nS MAXIMUM
- RECOVERY TIME 150nS TYPICAL 300nS MAXIMUM
- TSS -40 dBm TYP.
- VSWR (RF) 3:1 MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS TYPICAL (50 MIN LOAD)
- DC POWER (NO LOAD)
 - +V 12V @ 75MA MAXIMUM
 - V 12V @ 75MA MAXIMUM
- SIZE 2.2" X 1.5" X 0.4"



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

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.010
X.XXX ± 0.005

AMERICAN MICROWAVE CORPORATION

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



APPROVALS		DATE	TITLE			REV.
DRAWN	JDJ	7/6/04	PRODUCT FEATURE LVD-218-40/45 2 TO 18 GHz, 40/45 dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER			-
REDRAWN	JDJ	8/10/04	SIZE	FSCM NO.	DWG NO.	
ISSUED	LA	9/7/04	A	60483	100-7035	
			SCALE	N:S	SHEET	1 OF 3