

DESCRIPTION

AMC MODEL LVD-218-50SF OPTION: 618, MS IS A SUPER-FAST DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE FROM 6 TO 18 GHz FREQUENCY RANGE, WITH TRUE DC COUPLING. THIS UNIT USES PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THIS DLVA IS OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

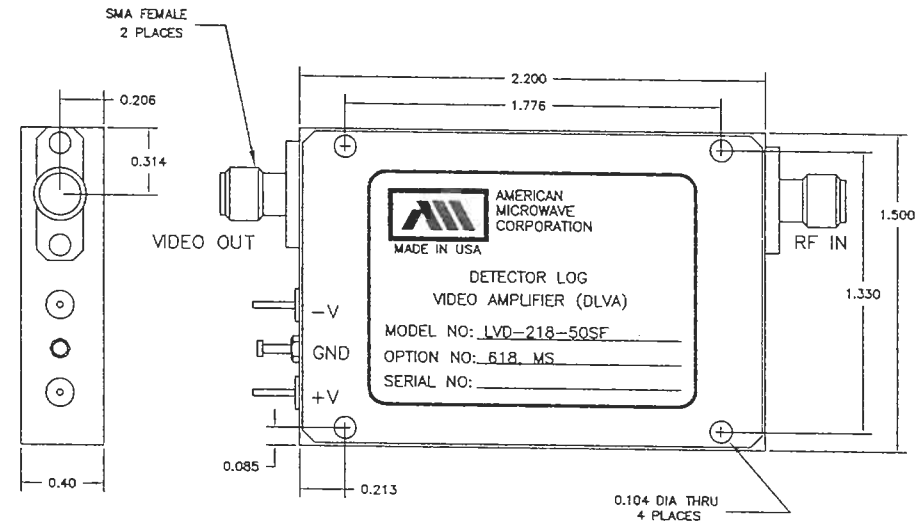
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB#	D406122	06/28/04

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 6 TO 18 GHz
- FREQUENCY FLATNESS @ -20dBm ± 1.5 dB
- LOGGING RANGE -40 TO 0 dBm MINIMUM
- USEFUL RANGE -40 TO +5 dBm
- LOG LINEARITY ERROR ± 1.0 dB MAXIMUM (-40 TO 0 dBm)
- LOG SLOPE 50 mV/dB
- LOG SLOPE ACCURACY $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (0°C TO +60°C)
- PULSE RESPONSE 50 ns TO CW
- RISE TIME (10% TO 90% POINTS) 15 ns TYPICAL
- SETTling TIME 45 ns MAXIMUM
- RECOVERY TIME 150 ns TYPICAL 300 ns MAXIMUM
- TSS -40 dBm MINIMUM
- VSWR (RF) 3.0:1
- MAXIMUM RF INPUT +15 dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50 Ω MINIMUM LOAD)
- THRU-PUT FROM RF IN TO VIDEO OUTPUT 35 nSec MAXIMUM
- VIDEO OUTPUT MATCHING BETWEEN SET OF 2 ± 2 dB MAXIMUM, ± 1.5 dB TYPICAL
- DC POWER (100 Ω LOAD)
 - +V 12V @ 120mA MAXIMUM
 - V 12V @ 80mA 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

- NOTES:
- 1) DIMENSIONS ARE IN INCHES
 - 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010

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APPROVALS		DATE	TITLE			
DRAWN	JDJ	6/28/04	PRODUCT FEATURE LVD-218-50SF OPTION: 618, MS 6-18 GHz DETECTOR LOG VIDEO AMPLIFIER			
REDRAWN	JDJ	8/10/04	SIZE	FSCM NO.	DWG NO.	REV.
ISSUED	lt	7/30/04	A	60483	100-7022	-
			SCALE	N:S	SHEET	1 OF 3