

DESCRIPTION

AMC MODEL LVDN-0518-50 IS A 0.5 TO 18 GHz, TRULY DC COUPLED 40/45dB DETECTOR LOG VIDEO AMPLIFIER (DLVA) CONSTRUCTED USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY. IT HAS RF INPUT NOISE/CW IMMUNE CIRCUITRY BUILT FOR SYSTEM NOISE CANCELLATION.

SPECIFICATIONS

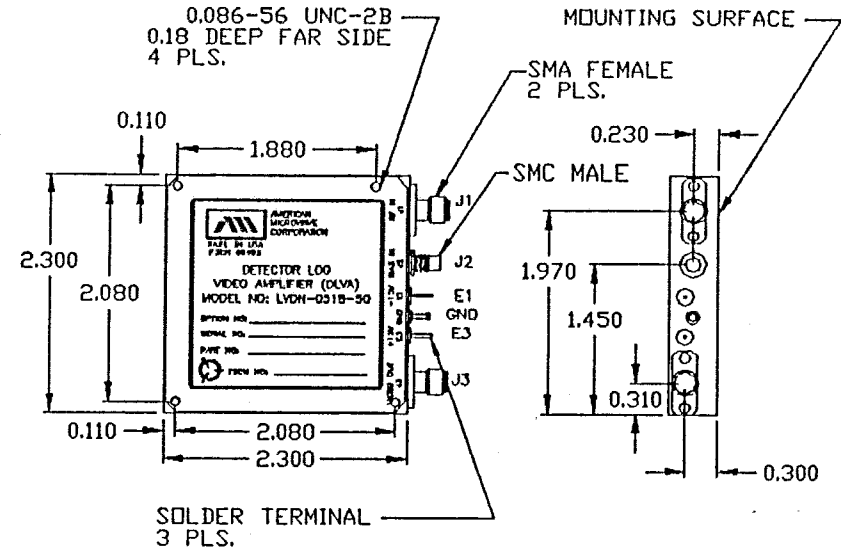
● FREQUENCY RANGE	0.5 TO 18 GHz
● FREQUENCY FLATNESS	±1.0dB MAXIMUM
● TSS	-42dBm MINIMUM
● LOGGING RANGE	-40 TO 0 dBm MINIMUM
● USEFUL RANGE	-40 TO +5 dBm
● LOG ERROR	±0.5dB
● LOG SLOPE	50mV/dB OR AS DESIRED
● LOG SLOPE ACCURACY	±4% OF AVERAGE SLOPE, MAXIMUM
● LOG TEMPERATURE STABILITY	±1.0dB MAXIMUM (-54° TO +85°C)
● BASELINE STABILITY	±1.0dB MAXIMUM (-54° TO +85°C)
● RISE TIME	20nS MAXIMUM
● RECOVERY TIME	150nS TYPICAL, 300nS MAXIMUM
● SETTling TIME	45 nS MAXIMUM
● VSWR (RF)	3:1 MAXIMUM
● VIDEO LOAD	50Ω TYPICAL, OR AS DESIRED
● VIDEO SOURCE IMPEDANCE	50Ω TYPICAL, OR AS DESIRED
● VIDEO OUTPUT RANGE	0 TO 2.5 VOLTS
● PULSE WIDTH TO CW	50nS
● DC POWER (NO LOAD)	±9V TO ±18V @ 75MA MAXIMUM
● SIZE	2.3" X 2.3" X 0.45"

AVAILABLE OPTIONS (SPECIFY)

A01	SELF OR EXTERNALLY BIASED NOISE/CW IMMUNITY
A02	EXTENDED FREQUENCY RANGE OF 0.2 TO 20 GHz
A03	EXTENDED DYNAMIC RANGE
A04	FASTER RISE AND RECOVERY TIMES
A05	HIGH CW/PULSED RF POWER PROTECTION
A06	ALTERNATE LOG SLOPES

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/12/92	

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ±0.020
X.XXX ±0.010
- 3) WEIGHT: 2.9 OZ

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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		PRODUCT FEATURE LVDN-0518-50 0.5 TO 18 GHz, NOISE IMMUNE, 40/45dB DETECTOR LOG VIDEO AMPLIFIER	
APPROVALS	DATE		
DRAWN <i>WSP</i>	11/12/92		
CHECKED <i>WSP</i>			