

**DESCRIPTION:**

AMC MODEL LVDN-0518-50-CW IS A 0.5 TO 18 GHz, TRULY DC COUPLED 40/45 dB 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. WE CUSTOMIZE FOR FIT AND FUNCTION, SELECT FROM STANDARD OPTIONS LISTED BELOW OR CONTACT US FOR OTHER SPECIALIZED OPTIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ER# 047-18	10/4/18	RRA

**SPECIFICATIONS:**

- FREQUENCY RANGE: .....0.5 GHz TO 18 GHz
- FREQUENCY FLATNESS: .....±1.0 dB MAX
- TSS: .....-40 dBm MIN, (-42 dBm TYPICAL)
- LOGGING RANGE: .....-40 TO 0 dBm MIN
- USEFUL RANGE: .....-40 TO +5 dBm
- LOG LINEARITY ERROR: .....±0.5 dB (25°C)  
.....±1.0 dB MAX (-54°C TO +85°C)
- LOG SLOPE: .....50mV/dB OR AS DESIRED
- LOG SLOPE ACCURACY: .....±10% OF AVERAGE SLOPE, MAX
- LOG TEMPERATURE STABILITY: .....±1.0 dB MAX (-54°C TO +85°C)
- BASELINE STABILITY: .....±1.0 dB MAX (-54°C TO +85°C)
- RISE TIME: .....20 nS MAX
- RECOVERY TIME: .....300 nS MAX, 150 nS TYPICAL
- SETTling TIME: .....45 nS MAX
- VSWR (RF): .....3:1 MAX
- VIDEO LOAD: .....50Ω TYPICAL
- VIDEO SOURCE IMPEDANCE: .....50Ω TYPICAL
- VIDEO OUTPUT RANGE: .....0 TO 2.5 VOLTS
- PULSE WIDTH TO CW: .....50 nS
- DC POWER (NO LOAD): .....±12V AT 75mA MAX
- SIZE: .....2.3" X 2.3" X 0.45"
- WEIGHT: .....2.9 OZ

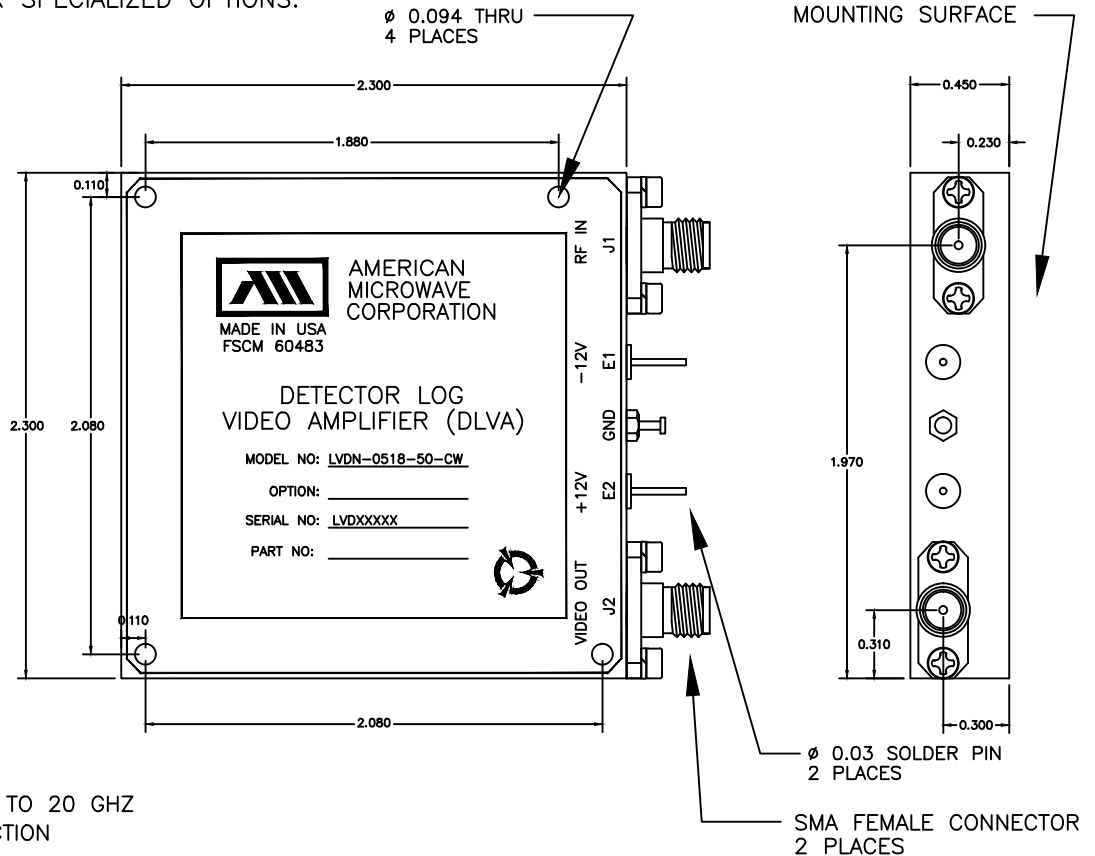
**OPTIONS:**

- A02: .....EXTENDED FEQUENCY RANGE OF 0.2 TO 20 GHZ
- A05: .....HIGH CW/PULSED RF POWER PROTECTION
- A06: .....ALTERNATE LOG SLOPES


**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: .....-54°C TO +85°C (OPERATING)  
.....-54°C TO +125°C (STORAGE)
- HUMIDITY: .....MIL-STD-202F, METHOD 103B COND. B
- MECHANICAL 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 OPERATING TEMPERATURE  
 NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION  
 \* Units are designed to meet Environmental ratings but not tested.  
 If Environmental Testing is required, please contact Sales Department.



ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES: X.XX ±0.020  
 X.XXX ±0.010

 ISO 9001:2015 CERTIFIED		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND			
		TITLE: PRODUCT FEATURE LVDN-0518-50-CW 0.5 TO 18 GHz, NOISE IMMUNE, 40/45 dB DETECTOR LOG VIDEO AMPLIFIER			
APPROVALS	DATE	SIZE	FSCM NO.	DWG NO.	REV.
DRAWN: RJW	10/4/18	A	60483	100-8900	A
ENG: RRA	10/4/18	SCALE N:S		SHEET 1 OF 1	
QAE: RRA	10/4/18				