

DESCRIPTION:

AMC MODEL LVD-709804-50-7193141, OPTION: CS IS A 7.9 TO 8.4 GHz, DC COUPLED DETECTOR LOG VIDEO AMPLIFIER FOR CONTINUOUS WAVE APPLICATIONS. IT INCLUDES AN INPUT LOWPASS FILTER, TEMPERATURE SENSOR CIRCUITRY, EMI SHIELDING, AND IT IS ENVIRONMENTALLY SEALED.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		- ORIGINAL RELEASE JOB# D312240E1	3/3/04	

SPECIFICATIONS:

- FREQUENCY: 7.9 - 8.4 GHz
- VSWR: 1.5:1 MAX
- SECOND HARMONIC SUPPRESSION: 40 dB MIN
15.8 TO 16.8 GHz
- OPERATIONAL INPUT POWER: 5 dBm MAX
- LOGGING RANGE: 37 dB MIN, 40 dB MIN GOAL
- LOGGING SLOPE: 49.0 - 51.0 mV/dB
49.5 - 50.5 mV/dB GOAL
- OVERALL LINEARITY*: ±1.0 dB @ +2 dBm
±2.0 dB @ -35 dBm
- VIDEO LOAD: 100 OHMS ±1%
- VIDEO BANDWIDTH: ≤0.5 MHz WITH A 100 OHM LOAD
- LONG TERM DRIFT: ±0.025 dB/yr
- OUTPUT VOLTAGE: 0.3 Vdc MIN, 2.75 Vdc MAX
- POWER SUPPLY: +28 Vdc @ 225 mA MAX
- PHYSICAL DIMENSIONS: 4.50 x 2.50 x 1.10 in.
- WEIGHT: 1 lb. MAX
- RF INPUT CONNECTOR: SMA FEMALE CONNECTOR
- VIDEO OUTPUT CONNECTOR: SMA FEMALE CONNECTOR
- POWER CONNECTOR: D38999/20WB5PN
- MEAN TIME BETWEEN FAILURE: 25000 HOURS MIN

* The combined accuracy of frequency, logging, and temperature within the range defined by ±1.0dB @ +2dBm to ±2.0dB @ -35dBm interpolated between endpoints.

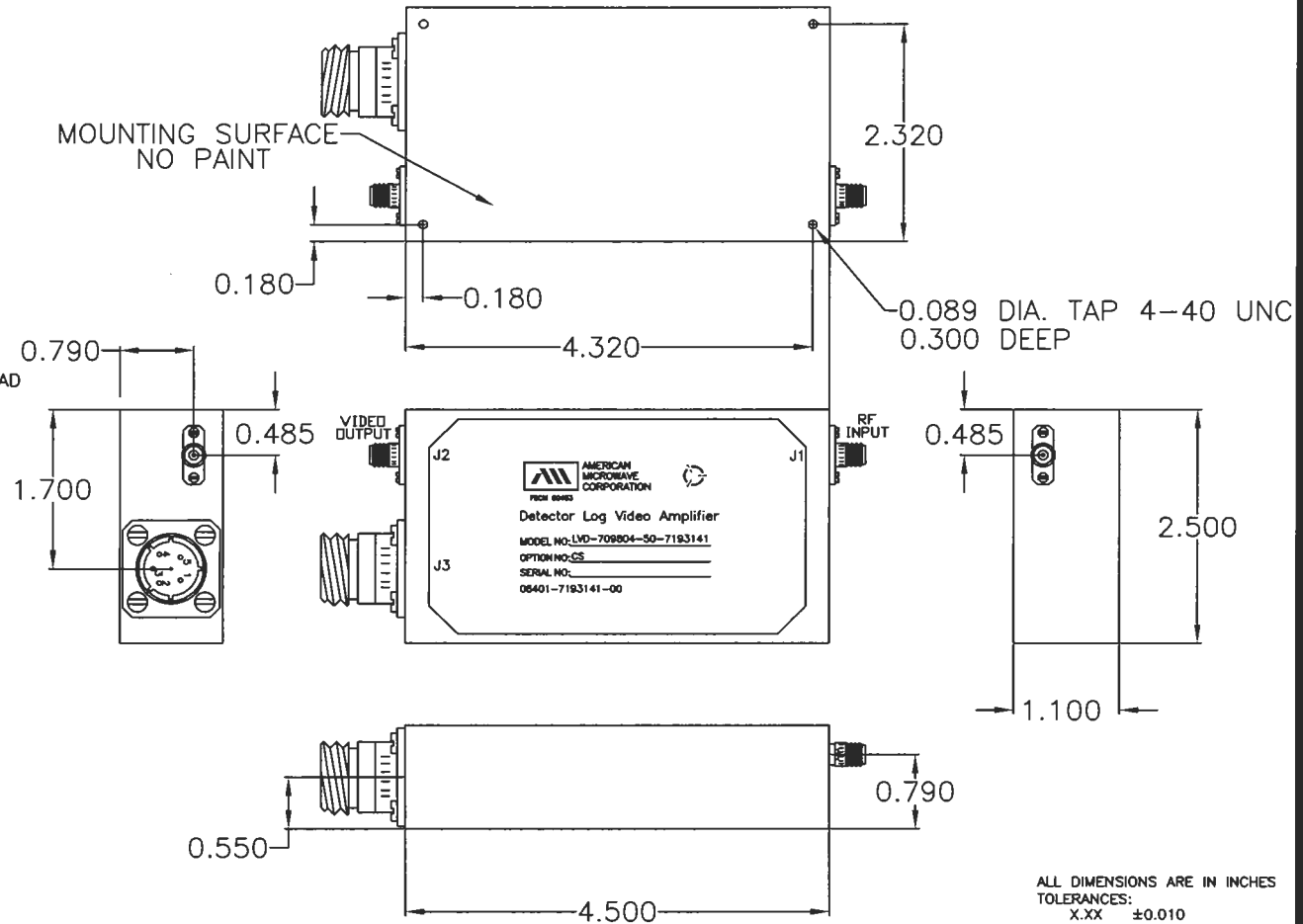
CONNECTOR PINOUT

- J1 - RF INPUT
- J2 - VIDEO OUTPUT
- J3 - 1 - +28 Vdc
- J3 - 2 - +28 Vdc RTN
- J3 - 3 - N/C
- J3 - 4 - TEMPERATURE OUTPUT
- J3 - 5 - TEMPERATURE RTN

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO +85°C (OPERATING)
-55°C TO +85°C (STORAGE)
- HUMIDITY: CAPABLE OF CONTINUOUS OPERATION UP TO 100% HUMIDITY
- SHOCK: RTCA/DO-160D, PER SECTION 7.2 FIGURE 7.2
- VIBRATION: RTCA/DO-160D, PER FIGURE 8-1 AND TABLE 8-1
- ALTITUDE: 50000 Ft.
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A
- SALT SPRAY: RTCA/DO-160D, PER SECTION 14, CATEGORY S
- FUNGUS: RTCA/DO-160D, PER SECTION 13, CATEGORY F
- EXPLOSIVE ATMOSPHERE: RTCA/DO-160D, PER SECTION 9, CATEGORY F
- EMI/EMC: MIL-STD-461E (AIR FORCE LIMITS, AIRCRAFT EXTERNAL)
- POWER: MIL-STD-704E
- EXTERNAL FINISH: FED-STD-595, COLOR 27038

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION



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

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APPROVALS		DATE	TITLE		
DRAWN <i>JRM</i>		3/3/04	PRODUCT FEATURE LVD-709804-50-7193141 OPTION: CS		
CHECKED <i>JA</i>		4/27/04	SIZE A	FSCM NO. 60483	DWG NO. 100-6883
ISSUED			SCALE N:S		SHEET 1 OF 3