

DESCRIPTION

AMC'S 0.5 TO 18 GHz DLVA, MODEL LVD-8010-55, OFFERS 3 SEPARATE SWITCHED VIDEO FILTERS. TTL CONTROL SIGNAL SWITCHES 30 MHz, 3 MHz, OR 300 KHz VIDEO BANDWIDTH FILTERS GIVING TSS OF -40dBm, -44dBm, AND -48dBm. SELECTING VIDEO FILTERS DOES NOT AFFECT THE -45dBm TO +10 dBm DYNAMIC LOGGING RANGE WHICH HAS A LINEARITY ERROR OF ± 0.5 dB, FREQUENCY FLATNESS FROM 7.95 TO 10.05 GHz OF ± 1.0 dB, AND TEMPERATURE STABILITY (0°C TO +60°C) OF ± 1.0 dB.

SPECIFICATIONS

- FREQUENCY RANGE: 7.95 TO 10.05 GHz
- INPUT VSWR: 2.0:1
- DYNAMIC RANGE: 55 dB MAXIMUM
- LOGGING RANGE: -45 TO +10 dBm
- TSS:
 - AT 1dB VIDEO BANDWIDTH OF -45dBm
 - 12 MHz, 3dB BANDWIDTH OF
 - 27 MHz (0 TO 60°C)
- MAXIMUM INPUT POWER: +15dBm
- MAXIMUM DUTY CYCLE: CW
- LOGGING SLOPE: 50mV/dB $\pm 10\%$
- LOGGING LINEARITY: ± 2.5 dB MAXIMUM (BEST STRAIGHT LINE DEVIATION) ± 1.5 dB TYPICAL (-45dBm TO +10dBm)
- RISE TIME (10 TO 90%): ≤ 40 nS
- RECOVERY TIME: 250nS (SPECIFIED FROM +5 dBm TO TSS)
500nS (SPECIFIED FROM +10 dBm TO TSS)
- VIDEO OUTPUT: 0 TO 3 VOLTS MAXIMUM $\pm 10\%$
- VIDEO OUTPUT IMPEDANCE: 75 OHMS $\pm 10\%$
- DC POWER:
 - +V 15V @ 230mA MAXIMUM
 - V 15V @ 100mA MAXIMUM
- SIZE 3.2" X 1.5" X 0.5"
- RF/VIDEO CONNECTORS SMA FEMALE
- TEMPERATURE:
 - OPERATING: 0°C TO +60°C
 - STORAGE: -54°C TO +74°C
- HUMIDITY: 0 TO 90%
- VIBRATION: 0.15" DOUBLE AMPLITUDE DISPLACEMENT
AT 2-16Hz
2G ACCELERATION FROM 16-500Hz

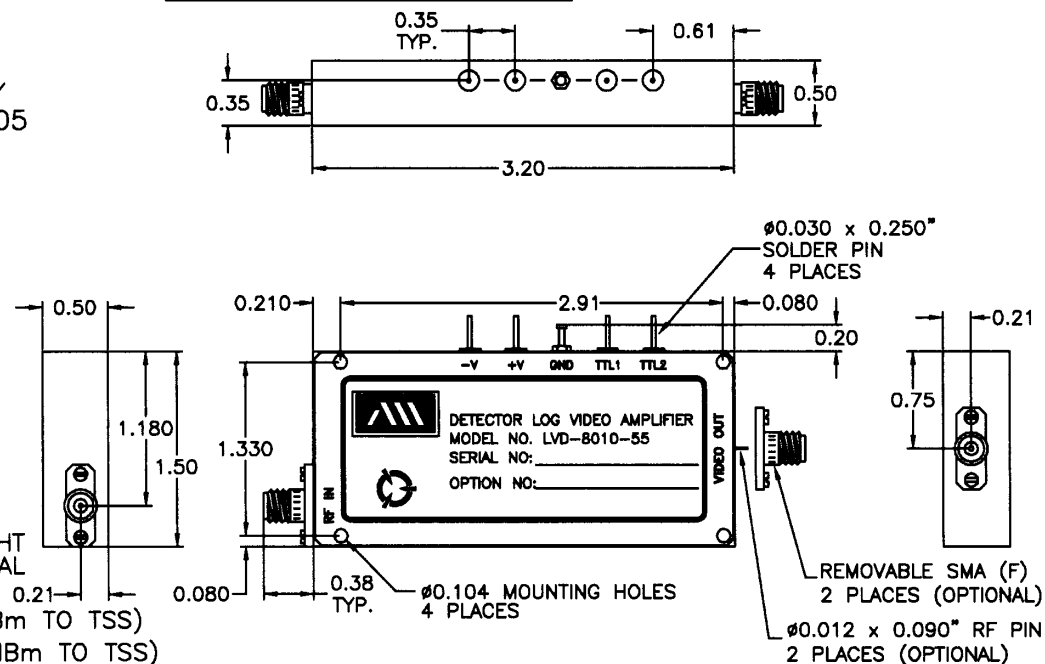
AVAILABLE OPTIONS (SPECIFY)

- A01 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02 ALTERNATIVE LOG SLOPES, AS DESIRED
- A03 ALTERNATIVE VIDEO BANDWIDTHS, AS DESIRED
- A04 HIGH RF CW/PEAK POWER PROTECTION
- A05 OTHER VIDEO LOADS
- A06 EXTENDED DYNAMIC RANGE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	2/18/98	

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 -54C TO +85C (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

		AMERICAN MICROWAVE CORPORATION 7311G GROVE RD., FREDERICK, MD. 21701 TEL: (301) 662-4700 FAX: (301) 662-4938	
		PRODUCT FEATURE LVD-8010-55 7.95 TO 10.05, 55dB DETECTOR LOG VIDEO AMPLIFIER (DLVA) WITH SWITCHABLE VIDEO FILTERING	
APPROVALS DRAWN WYP CHECKED	DATE 2/18/98	SIZE A	SHEET 1 OF 2

SIZE A

SHEET 1 OF 2

DWG. # 100-2808-2