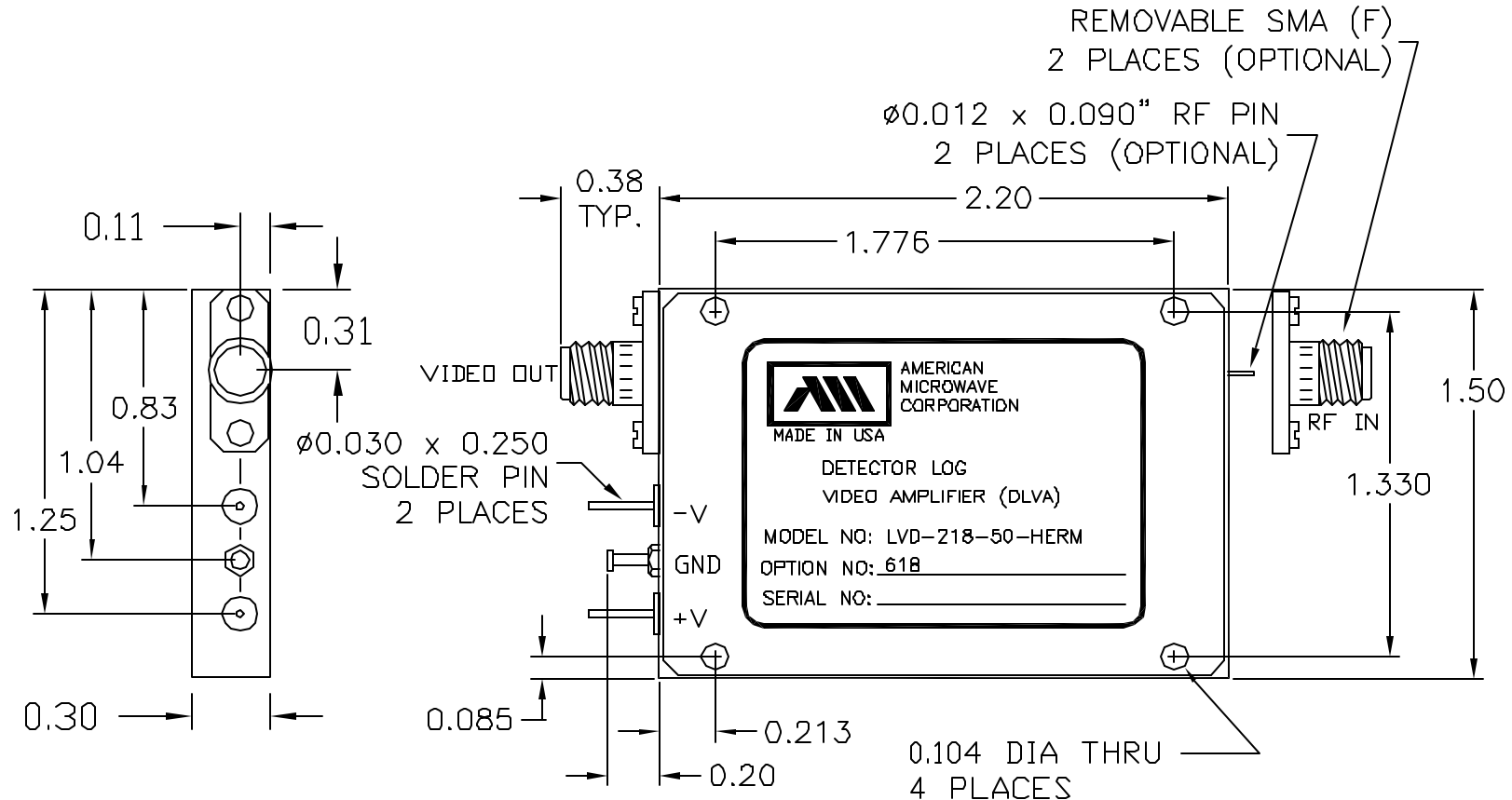


DESCRIPTION

THE LVD-218-HERM OPTION 618 IS A 6 TO 18 GHz HERMETICALLY SEALED 50 dB DYNAMIC RANGE DETECTOR LOG VIDEO AMPLIFIER WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH HIGH SPEED SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL JOB # D602038NPE-2	08/22/08	

MECHANICAL HOUSING



AMERICAN MICROWAVE CORPORATION

7311G GROVE RD., FREDERICK, MD. 21701

TEL: (301) 662-4700 FAX: (301) 662-4938

APPROVALS

DATE

DRAWN

08/22/08

CHECKED

PRODUCT FEATURE

LVD-218-50-HERM OPTION 618

6 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER

SIZE A

SHEET 2 OF 4

DWG. # 100-7678

DESCRIPTION

THE LVD-218-50-HERM OPTION 618 IS A 6 TO 18 GHz HERMETICALLY SEALED, 50 dB DYNAMIC RANGE DETECTOR LOG VIDEO AMPLIFIER WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

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 ± 1.0 dB MAXIMUM
- LOGGING RANGE -40 TO -0dBm MINIMUM
- USEFUL RANGE -40 TO +5dBm
- LOG LINEARITY ERROR ± 0.5 dB MAXIMUM (ROOM TEMP)
 ± 1.0 dB AVE (-54° TO +90°C)
- LOG SLOPE 50mV/dB NOMINAL
- LOG SLOPE VARIATION $\pm 4\%$ TYPICAL
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54° TO +90°C)
- PULSE RESPONSE 50ns TO CW
- RISE TIME 20ns MAXIMUM
- SETTLING TIME 45ns MAXIMUM
- RECOVERY TIME 150ns TYPICAL 300ns MAXIMUM
- TSS -40dBm MINIMUM
- VSWR (RF) 3:1 MAXIMUM
- MAXIMUM RF INPUT +15dBm
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS TYPICAL (50 Ω MIN LOAD)
- DC POWER (NO LOAD)
 - +V 12V @ 75MA MAXIMUM
 - V 12V @ 75MA MAXIMUM
 - OTHER VOLTAGES AVAILABLE

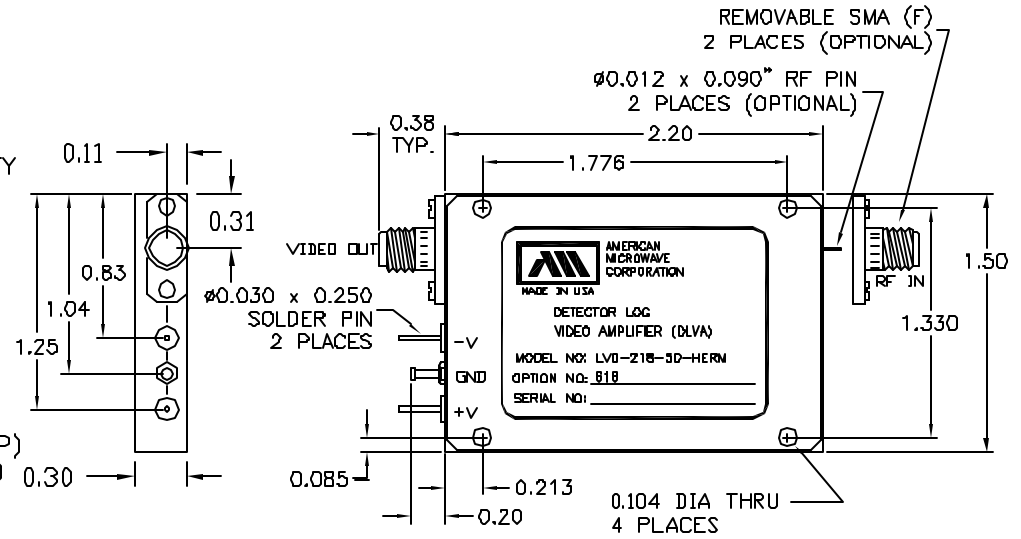
• SIZE 2.2" X 1.5" X 0.4"

AVAILABLE OPTIONS (SPECIFY)

- A01 EXTENDED 0.2 TO 20 GHz RF FREQUENCY RANGE
- A02 EXTENDED 0.5 TO 18 GHz RF FREQUENCY RANGE
- A03 FASTER RISE/RECOVERY TIMES
- A04 ALTERNATE LOG SLOPES
- A05 HIGH POWER RF CW/PEAK PROTECTION
- A06 EXTENDED LOGGING RANGE
- A07 OTHER VIDEO LOADS

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL JOB # D602038NPE-2	06/22/06	



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
- 3) WEIGHT: 1.75 OZ

ENVIRONMENTAL RATINGS

- TEMPERATURE -54°C TO +90°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



AMERICAN MICROWAVE CORPORATION
 7311G GROVE RD., FREDERICK, MD. 21701
 TEL: (301) 662-4700 FAX: (301) 662-4938

APPROVALS	DATE
DRAWN <i>MJB</i>	6/22/06
CHECKED	

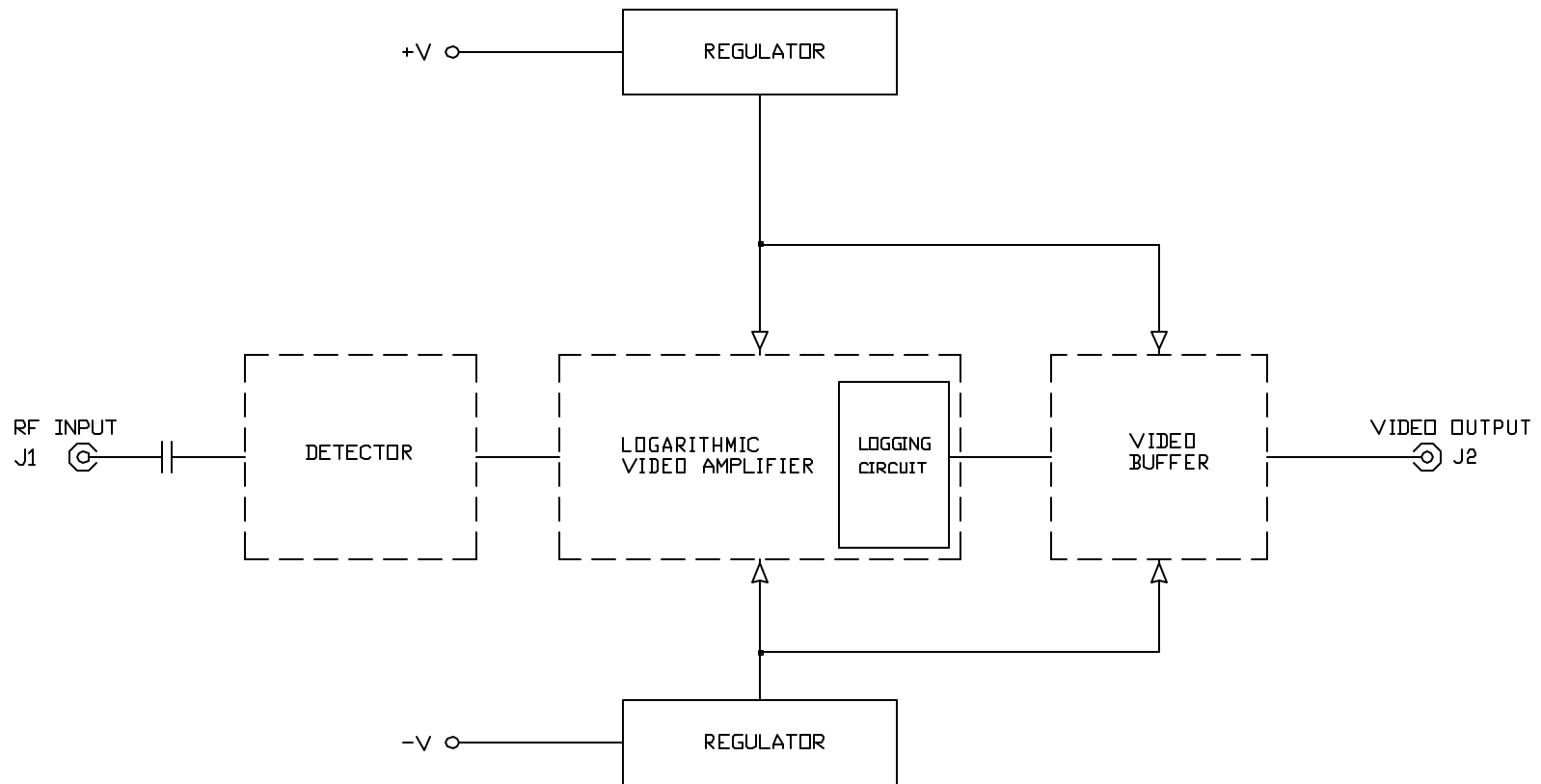
PRODUCT FEATURE		
LVD-218-50-HERM OPTION 618		
6 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER		
SIZE A	SHEET 1 OF 4	DWG. # 100-7679

DESCRIPTION

THE LVD-218-50-HERM OPTION 618 IS A 6 TO 18 GHz HERMETICALLY SEALED 50 dB DYNAMIC RANGE DETECTOR LOG VIDEO AMPLIFIER WITH TRUE DC COUPLING. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVA'S ARE OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL JOB # D602038NPE-2	08/22/08	

BLOCK DIAGRAM



AMERICAN MICROWAVE CORPORATION
 7311G GROVE RD., FREDERICK, MD. 21701
 TEL: (301) 662-4700 FAX: (301) 662-4938

APPROVALS	DATE
DRAWN <i>MJB</i>	08/22/08
CHECKED	

PRODUCT FEATURE	
LVD-218-50-HERM	OPTION 618
6 TO 18 GHz, 40/45dB, TRULY DC-COUPLED DETECTOR LOG VIDEO AMPLIFIER	
SIZE A	SHEET 3 OF 4
DWG. # 100-7679	