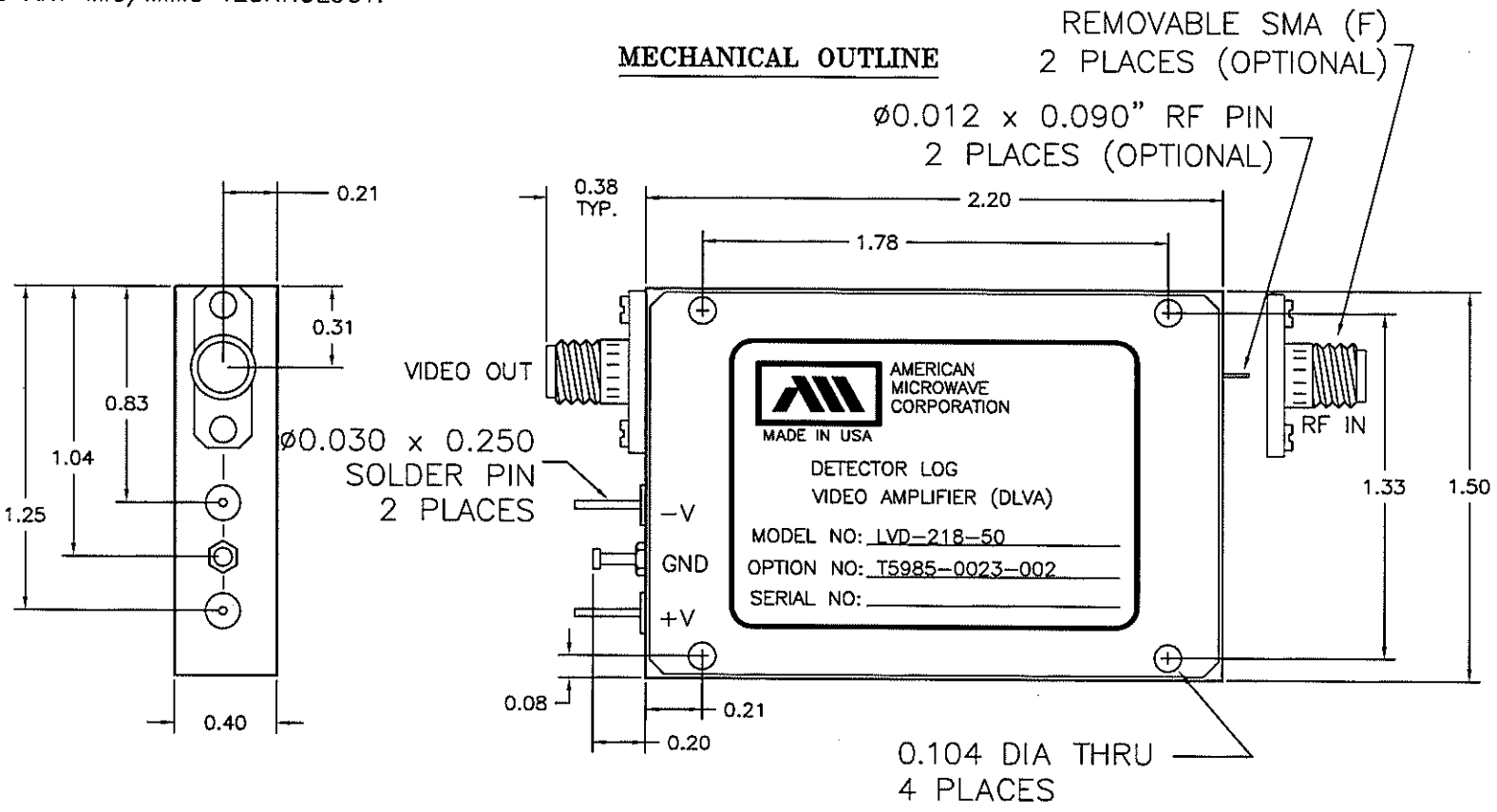
DESCRIPTION

AMC MODEL LVD–218–50 OPTION: T5985–0023–002 IS A 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 15 TO 16 GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE–OF–THE–ART MIC/MMIC TECHNOLOGY.

MECHANICAL OUTLINE



AMERICAN MICROWAVE CORPORATION
7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED

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

APPROVALS	DATE
DRAWN PMV	1/03/08
CHECKED KL	1/3/08
ISSUED	

TITLE: MECHANICAL OUTLINE
LVD–218–50
OPTION: T5985–0023–002
15 – 16 GHz, DETECTOR LOG VIDEO AMPLIFIER

SIZE	FSCM NO.	DWG NO.	REV.
A	60483	100–7214–2	–

SCALE N:S SHEET 2 OF 3

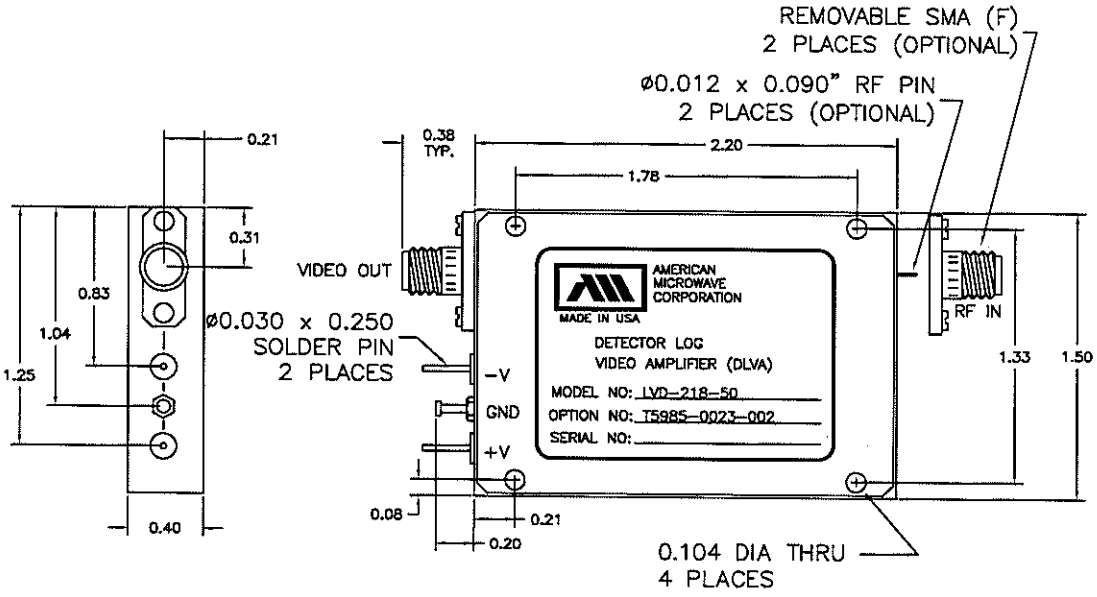
DESCRIPTION

AMC MODEL LVD-218-50 OPTION: T5985-0023-002 IS A 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 15 TO 16 GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	–	ORIGINAL RELEASE JOB# D712247PEX	01/03/08	

SPECIFICATIONS

- FREQUENCY RANGE: ..... 15 TO 16 GHz
- FREQUENCY FLATNESS: ..... ± 1.5 dB MAXIMUM
- LOGGING RANGE: ..... -40 TO 0 dBm MINIMUM
- USEFUL RANGE: ..... -40 TO +5 dBm
- LOG LINEARITY ERROR: ..... ± 1.0dB MAXIMUM (0.5dB TYP)
- LOG SLOPE: ..... 50 mV/dB
- LOG SLOPE ACCURACY: ..... ±4% OF AVERAGE SLOPE
- TEMPERATURE STABILITY: ..... ± 1.0 dB MAXIMUM (-40°C TO +60°C)
- RISE TIME: ..... 20 nSec MAXIMUM
- SETTLING: ..... 45 nSec MAXIMUM
- RECOVERY TIME: ..... 150 nSec TYPICAL
  200 nSec MAXIMUM
- TSS: ..... -40 dBm MINIMUM
- VSWR: ..... 2.5:1 MAXIMUM
- VIDEO OUTPUT LEVEL: ..... 0 TO 2.5 VOLTS (50 MINIMUM LOAD)
- DC POWER (NO LOAD)
  +V: ..... +12V @ 120 mA MAXIMUM
  -V: ..... -12V @ 80 mA MAXIMUM
- SIZE: ..... 2.20" x 1.50" x 0.40"



ENVIRONMENTAL RATINGS

- **TEMPERATURE:** ..... -40°C TO +60°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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

AMERICAN MICROWAVE CORPORATION
7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED

APPROVALS	DATE
DRAWN PMR	1/03/08
CHECKED	1/3/08
ISSUED	

TITLE: PRODUCT FEATURE
LVD-218-50
OPTION: T5985-0023-002
15 – 16 GHz, DETECTOR LOG VIDEO AMPLIFIER

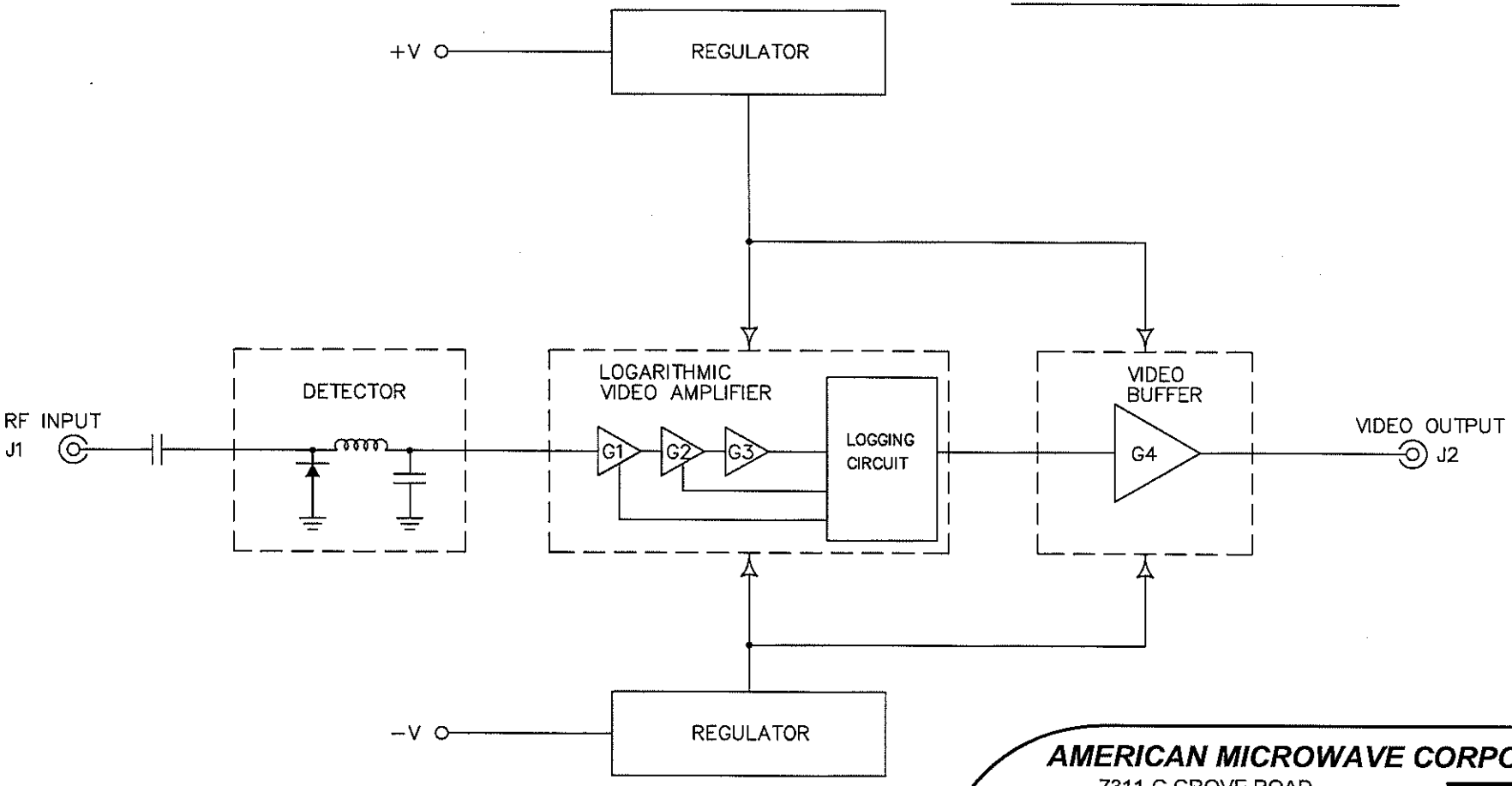
SIZE	FSCM NO.	DWG NO.	REV.
A	60483	100-7214-2	–

SCALE N:S SHEET 1 OF 3

DESCRIPTION

AMC MODEL LVD-218-50 OPTION: T5985-0023-002 IS A 50 dB DETECTOR LOG VIDEO AMPLIFIER DESIGNED TO OPERATE BETWEEN THE 15 TO 16 GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE-OF-THE-ART MIC/MMIC TECHNOLOGY.

FUNCTIONAL BLOCK DIAGRAM



CONFIDENTIAL AND PROPRIETARY

AMERICAN MICROWAVE CORPORATION
7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-4700 FAX: 301-662-4938
WEBSITE: www.americanmicrowavecorp.com
E-MAIL: sales@americanmicrowavecorp.com
ISO 9001:2000 CERTIFIED

APPROVALS	DATE
DRAWN PMV	1/09/08
CHECKED	1/3/06
ISSUED	

TITLE: FUNCTIONAL BLOCK DIAGRAM
LVD-218-50
OPTION: T5985-0023-002
15 - 16 GHz, DETECTOR LOG VIDEO AMPLIFIER

SIZE	FSCM NO.	DWG NO.	REV.
A	60483	100-7214-2	-

SCALE N:S SHEET 3 OF 3