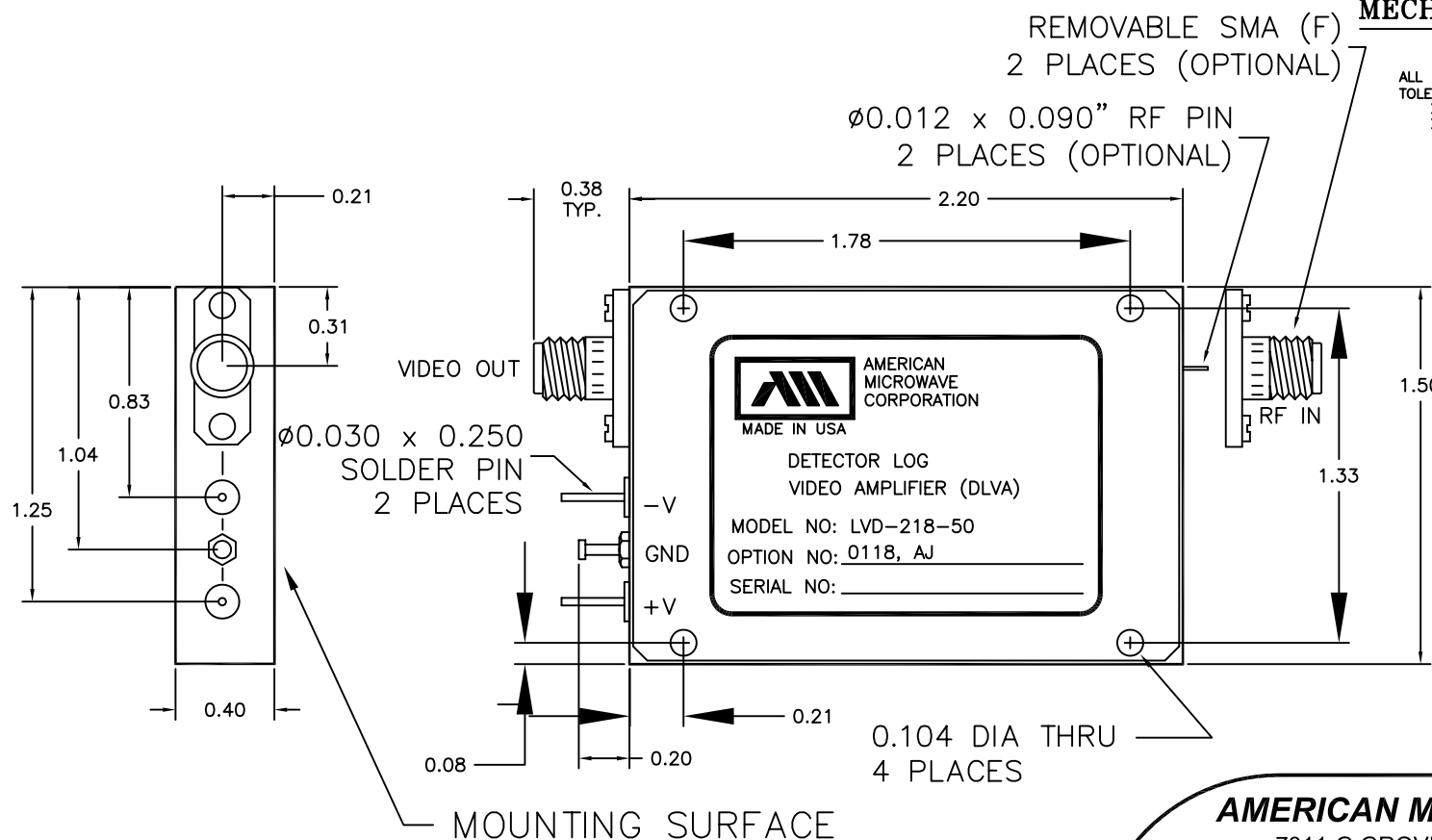


DESCRIPTION

AMC MODEL NO. LVD-218-50 OPTION 0118, AJ OPERATES FROM 100 MHz TO 18 GHz WITH A USEFUL DYNAMIC RANGE FROM -30 dBm TO +10 dBm AND IS TRULY DC COUPLED. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVAs ARE OF SUPERIOR CONSTRUCTION USING STATE OF THE ART MIC/MMIC TECHNOLOGY.

| REVISIONS | | | | |
|-----------|------|----------------------------------|----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | - | ORIGINAL RELEASE JOB# D509210XPE | 09/29/05 | |

MECHANICAL OUTLINE



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

AMERICAN MICROWAVE CORPORATION

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 E-MAIL: sales@americanmicrowavecorp.com
 ISO 9001:2000 CERTIFIED



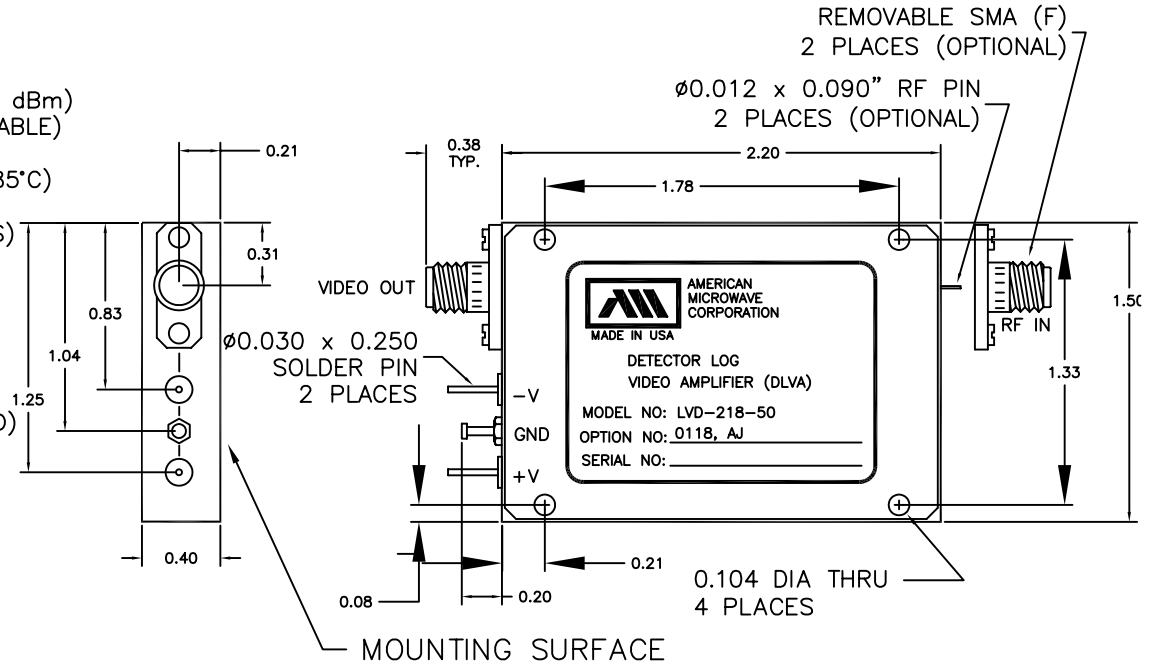
| APPROVALS | | DATE | TITLE | | | REV. |
|------------------|--|---------|---|----------|----------|--------|
| DRAWN <i>EJG</i> | | 9/29/05 | MECHANICAL OUTLINE LVD-218-50 OPTION 0118, AJ | | | - |
| CHECKED | | | SIZE | FSCM NO. | DWG NO. | |
| ISSUED | | | A | 60483 | 100-7511 | |
| | | | SCALE | N:S | SHEET | 2 OF 4 |

DESCRIPTION

AMC MODEL NO. LVD-218-50 OPTION 0118, AJ OPERATES FROM 100 MHz TO 18 GHz WITH A USEFUL DYNAMIC RANGE FROM -30 dBm TO +10 dBm AND IS TRULY DC COUPLED. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVAs ARE OF SUPERIOR CONSTRUCTION USING STATE OF THE ART MIC/MMIC TECHNOLOGY.

SPECIFICATIONS

- FREQUENCY RANGE 100 MHz TO 18 GHz
- FREQUENCY FLATNESS ± 1.0 dB MAXIMUM @ -20dBm (0.1 TO 18 GHz)
- LOGGING RANGE -30 TO +10 dBm
- USEFUL RANGE -30 TO +10 dBm
- LOG LINEARITY ± 1.0 dB MAXIMUM (-30 TO +10 dBm)
- LOG SLOPE 50mV/dB (OTHER SLOPES AVAILABLE)
- LOG SLOPE ACCURACY $\pm 4\%$ OF AVERAGE SLOPE
- TEMPERATURE STABILITY ± 1.0 dB MAXIMUM (-54° TO +85°C)
- PULSE RESPONSE 50ns TO CW
- RISE TIME 20ns MAX (10% TO 90% POINTS)
- SETTLE TIME 45ns MAXIMUM
- RECOVERY TIME 200ns TYPICAL 300ns MAXIMUM
- TSS -40dBm MINIMUM
- VSWR (RF) 3:1 MAXIMUM @ -20dBm (0.1 TO 18 GHz)
- MAXIMUM RF INPUT +13dBm MAXIMUM
- VIDEO OUTPUT LEVEL 0 TO 2.5 VOLTS (50 Ω MIN LOAD)
- DC POWER (NO LOAD)
 - +V 15V @ 120mA MAXIMUM
 - V 15V @ 80mA MAXIMUM
 - OTHER VOLTAGES AVAILABLE
- SIZE 2.2" X 1.5" X 0.4"



ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO +85°C (OPERATING)
..... -65°C TO +125°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

| REVISIONS | | | | |
|-----------|------|----------------------------------|----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
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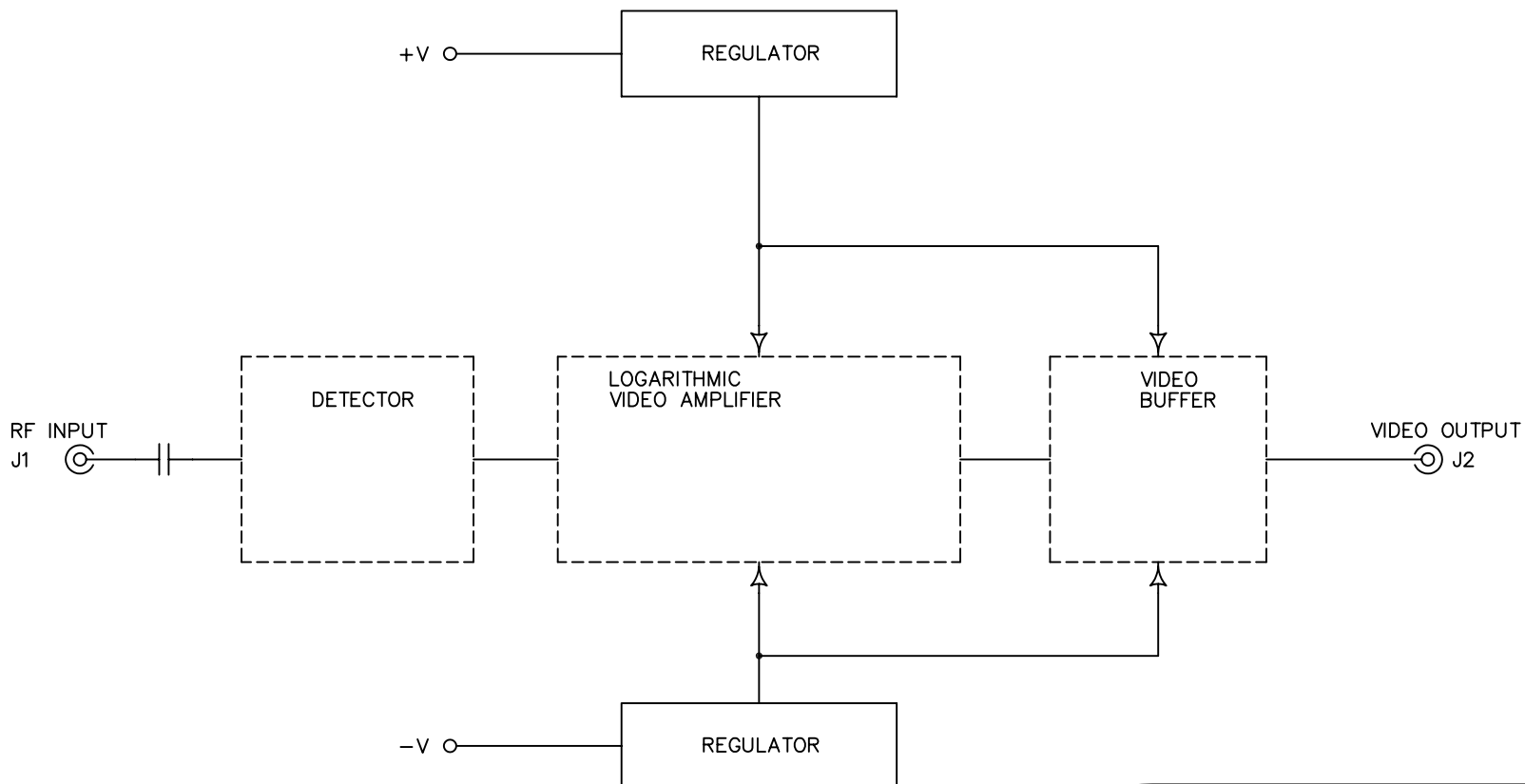
| APPROVALS | | DATE | TITLE | | | REV. |
|------------------|--|---------|--|----------|----------|--------|
| DRAWN <i>EJG</i> | | 9/29/05 | PRODUCT FEATURE LVD-218-50 OPTION 0118, AJ | | | - |
| CHECKED | | | SIZE | FSCM NO. | DWG NO. | |
| ISSUED | | | A | 60483 | 100-7511 | |
| | | | SCALE | N:S | SHEET | 1 OF 4 |

DESCRIPTION

AMC MODEL NO. LVD-218-50 OPTION 0118, AJ OPERATES FROM 100 MHz TO 18 GHz WITH A USEFUL DYNAMIC RANGE FROM -30 dBm TO +10 dBm AND IS TRULY DC COUPLED. UNITS EMPLOY PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. THE DLVAs ARE OF SUPERIOR CONSTRUCTION USING STATE OF THE ART MIC/MMIC TECHNOLOGY.

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FUNCTIONAL BLOCK DIAGRAM



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| APPROVALS | | DATE | TITLE | | | REV. |
|------------------|--|---------|---|----------|----------|--------|
| DRAWN <i>EJG</i> | | 9/29/05 | FUNCTIONAL BLOCK DIAGRAM LVD-218-50 OPTION 0118, AJ | | | - |
| CHECKED | | | SIZE | FSCM NO. | DWG NO. | |
| ISSUED | | | A | 60483 | 100-7511 | |
| | | | SCALE | N:S | SHEET | 3 OF 4 |