

DESCRIPTION

PMI MODEL DLVA HADA-D2002-0R518 IS A DETECTOR LOG VIDEO AMPLIFIER (DLVA) THAT OPERATES BETWEEN THE 0.5GHz TO 18.0GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 40 dB, A LOG SLOPE OF 50mV/dB, AND A NOMINAL VIDEO BANDWIDTH OF 12MHz. FURTHERMORE IT HAS BEEN DESIGNED USING CUTTING EDGE TECHNOLOGY WHICH PROVIDES STUNNING PERFORMANCE AND RELIABILITY IN A COMPACT PACKAGE MAKING IT AN OPTIMUM SOLUTION FOR HIGH SPEED CHANNELIZED RECEIVER APPLICATIONS.

SPECIFICATIONS

- FREQUENCY RANGE: 0.5GHz - 18.0GHz
- TSS -40dBm MIN. @-40°C TO +85°C
- FREQ. FLATNESS ±1.65dB MAX
- INPUT/OUTPUT CHARACTERISTIC (93 OHM)- $Y=2150 + 50X$
[X: INPUT(dBm), Y: OUTPUT (mv)]
- LOGGING ACCURACY ±1.5dB MAX (@+25°C, 10GHz)
[-36dBm ≤ INPUT ≤ +4dBm]
±3.1dB MAX (NOTE) *
- LOG LINEARITY ±0.5dB MAX@+25°C
±0.75dB MAX@-40°C TO +85°C
- MAXIMUM INPUT POWER (CW) +23dBm
- DUTY CYCLE 100%
- RISE TIME 30ns MAX (10% TO 90%)
- FALL TIME 500ns MAX (@ PULSE WIDTH 100usec INPUT) (90% TO 10%)
- DC OFFSET +95mV +55/-100mV
(INPUT 50 OHMS TERMINATED) (@-40°C TO +85°C)
- INPUT VSWR 3.0:1 MAX @+23dBm
- PROPAGATION DELAY 60n SEC MAX
- POWER SUPPLY +12VDC ±1VDC @ 125mA MAX
-12VDC ±1VDC @ 75mA MAX
- WARM UP TIME 2 MINUTES MAX
- MECHANICAL REQUIREMENTS SIZE: PER FIGURE.
WEIGHT: 150 GRAMS MAX.
- FINISH NICKEL PLATING
- *NOTES: INCLUDES FREQ. FLATNESS. INPUT POWER, TEMPERATURE DEVIATION DEVIATION AND DEVIATION FOR DC OFFSET. THE TEST SHALL BE PERFORMED USING RG-62 (OR EQUIV.), 5 METER, 93±0.5 OHMS TERMINATED.

ENVIRONMENTAL RATINGS

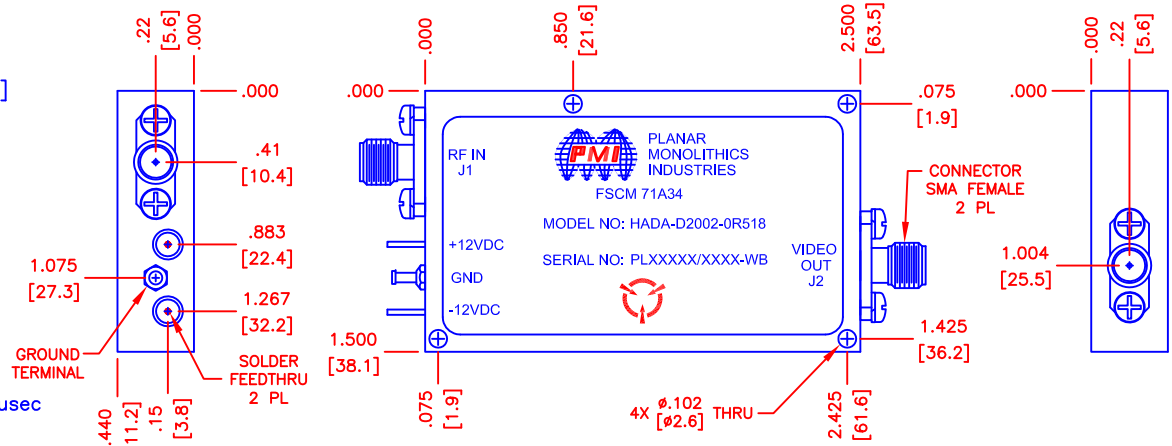
- **TEMPERATURE:** -40°C TO + 85°C (OPERATING)
-57°C TO +85°C (STORAGE)
- **HUMIDITY:** 90% TO 98% RH MIL-STD-202F, METHOD 106
- **SHOCK:** 30G, MIL-STD-202F, METHOD 213 COND. C
- **VIBRATION:** 10 TO 55Hz (0.06DA), 55 TO 2000Hz (10G)
MIL-STD-202F, METHOD 204 COND.C
- **ALTITUDE:** 20,000 FEET, MIL-STD-202F, METHOD 105
- **HEAT SHOCK:** MIL-STD-202F, METHOD 107 COND. A1

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
	-	PRELIMINARY	9/11/21	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>JPH</i>		9/11/21	PRODUCT FEATURE HADA-D2002-0R518		
CHECKED			SIZE A	FSCM NO. 71A34	DWG NO. PRELIMINARY
ISSUED			SCALE N:S		REV. -
					SHEET 1 OF 2

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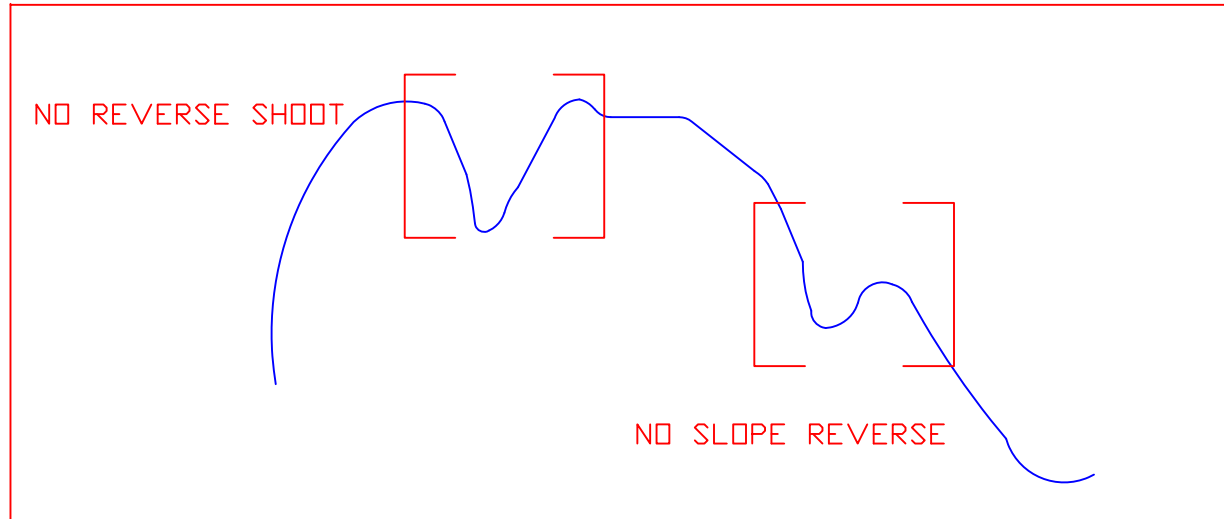


FIGURE 1: REVERSE SLOPE GRAPH

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