

DESCRIPTION

PMI MODEL DLVA HADA-D2001 IS A DETECTOR LOG VIDEO AMPLIFIER (DLVA) THAT OPERATES BETWEEN THE 500 MHz TO 2000 MHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 40 dB, A LOG SLOPE OF 50mV/dB, AND A NOMINAL VIDEO BANDWIDTH OF 12 MHz. 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

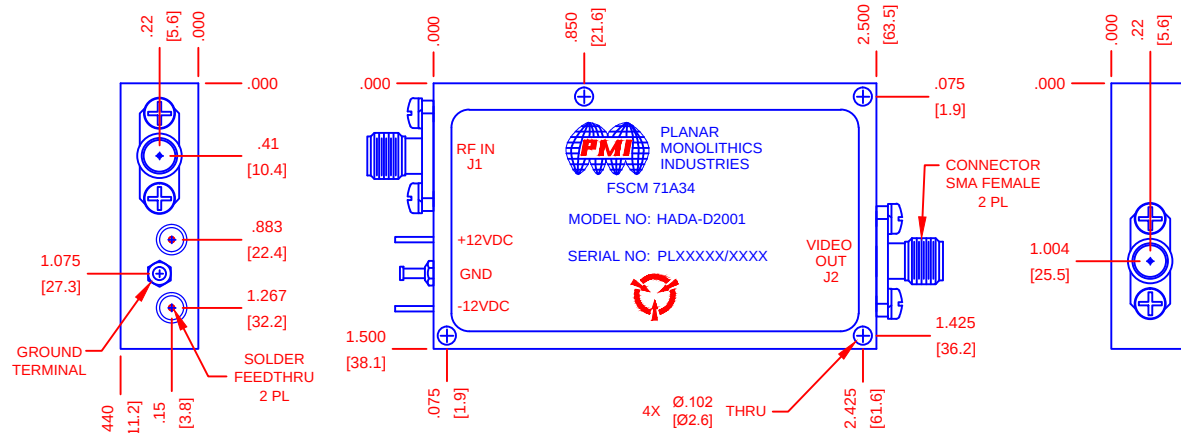
- FREQUENCY RANGE: _____ 0.5 TO 2.0 GHz
- TSS _____ -44 dBm MIN @ -40 °C TO +85 °C
- FREQ. FLATNESS _____ ± 0.75 dB MAX
- INPUT/OUTPUT CHARACTERISTIC (93 Ω) _____ Y=2350 + 50X
[X: INPUT(dBm), Y: OUTPUT (mv)]
- LOGGING ACCURACY _____ ± 1.5 dB MAX (@ +25 °C, 1.0 GHz) *
[-40 dBm $\leq$ INPUT $\leq$ 0dBm]
 ± 2.2 dB MAX (NOTE)
- LOG LINEARITY _____ ± 0.5 dB MAX @ +25 °C
 ± 0.75 dB MAX @ -40 °C TO +85 °C
- MAXIMUM INPUT POWER (CW) _____ +23 dBm
- DUTY CYCLE _____ 100%
- RISE TIME _____ 30 ns MAX (10% TO 90%)
- FALL TIME _____ 500 ns MAX (@ PULSE WIDTH 100 μ s INPUT) (90% TO 10%)
- DC OFFSET _____ +95 mV +55/-100 mV
(INPUT 50 OHMS TERMINATED) (@ -40 °C TO +85 °C)
- INPUT VSWR _____ 2.5:1 MAX @ +23 dBm
- PROPAGATION DELAY _____ 60 ns MAX
- POWER SUPPLY _____ +12 ± 1 VDC @ 125 mA MAX
-12 ± 1 VDC @ 75 mA 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-316 (OR EQUIV.), 20 cm, 93 $\pm 0.5 \Omega$ 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: 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
	A1	ECN # 16-0003	1/21/16	

MECHANICAL OUTLINE

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

4921 ROBERT J. MATHEWS PKWY SUITE 1
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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN: <i>M. Berry</i>		1/21/16		PRODUCT FEATURE DLVA HADA-D2001	
CHECKED				SIZE: A	FSCM NO. 71A34
ISSUED				DWG NO. DWG000129B	REV. A1
				SCALE: N:S	SHEET 1 OF 2

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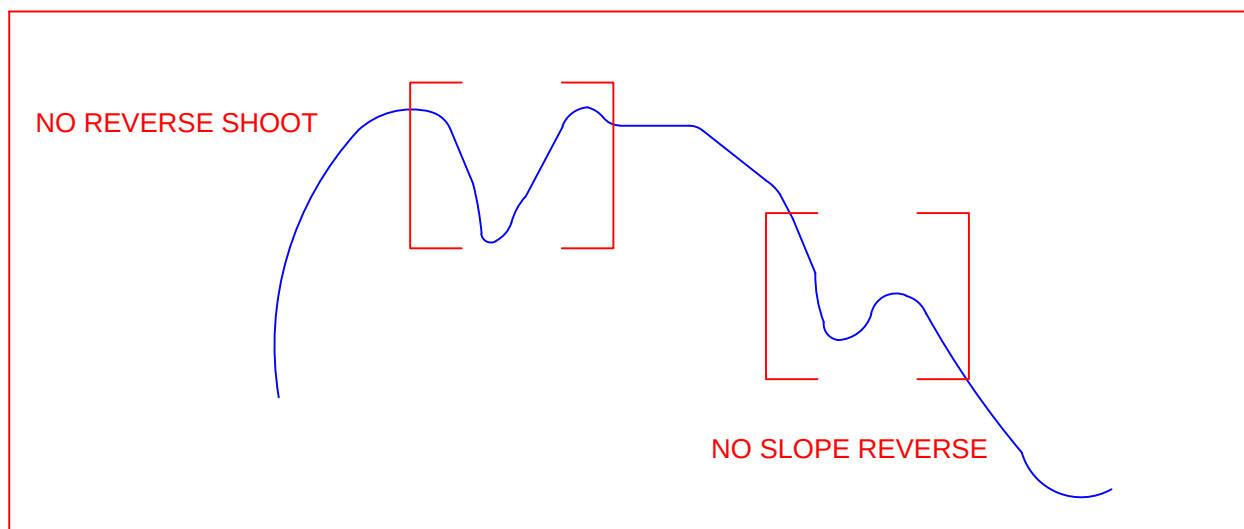


FIGURE 1: REVERSE SLOPE GRAPH

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