

DESCRIPTION

PMI MODEL DLVA HADA-D2002 IS A DETECTOR LOG VIDEO AMPLIFIER (DLVA) THAT OPERATES BETWEEN THE 2.0GHz 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: 2.0GHz - 18.0GHz
- TSS -40dBm MIN. @-40°C TO +85°C
- FREQ. FLATNESS ± 1.65 dB MAX
- INPUT/OUTPUT CHARACTERISTIC (93 OHM)- $Y=2150 + 50X$
[X: INPUT(dBm), Y: OUTPUT (mv)]
- LOGGING ACCURACY ± 1.5 dB MAX (@+25°C, 10GHz)
[-36dBm \leq INPUT \leq +4dBm]
 ± 3.1 dB MAX (NOTE) *
- LOG LINEARITY ± 0.5 dB MAX@+25°C
 ± 0.75 dB 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 ± 1 VDC @ 125mA MAX
-12VDC ± 1 VDC @ 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 \pm 0.5 OHMS TERMINATED.

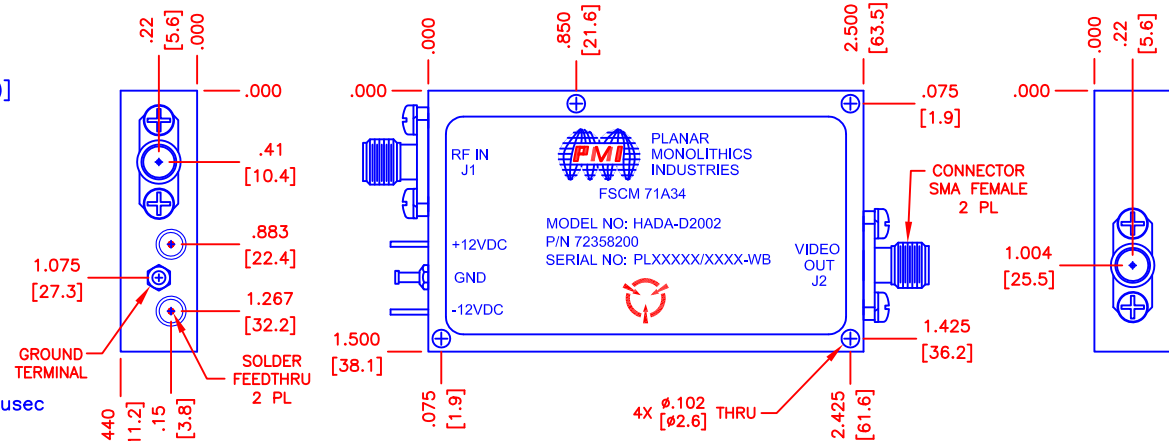
ENVIRONMENTAL RATINGS

- 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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/09/13	
	A2	ECN # 14-0156	9/19/14	
	A3	ECN # 15-0152	11/06/15	
	A4	ECN # 19-0035	1/23/19	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

4921 ROBERT J. MATHEWS PKWY SUITE 1
EL DORADO HILLS, CA 95762 USA
TEL: 916-542-1401 FAX: 916-265-2597
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN <i>J. LUDDEN</i>		10/09/13		PRODUCT FEATURE DLVA HADA-D2002	
CHECKED				SIZE A	REV. A4
ISSUED				FSCM NO. 71A34	OWG NO. DWG000131
				SCALE N:S	SHEET 1 OF 2

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

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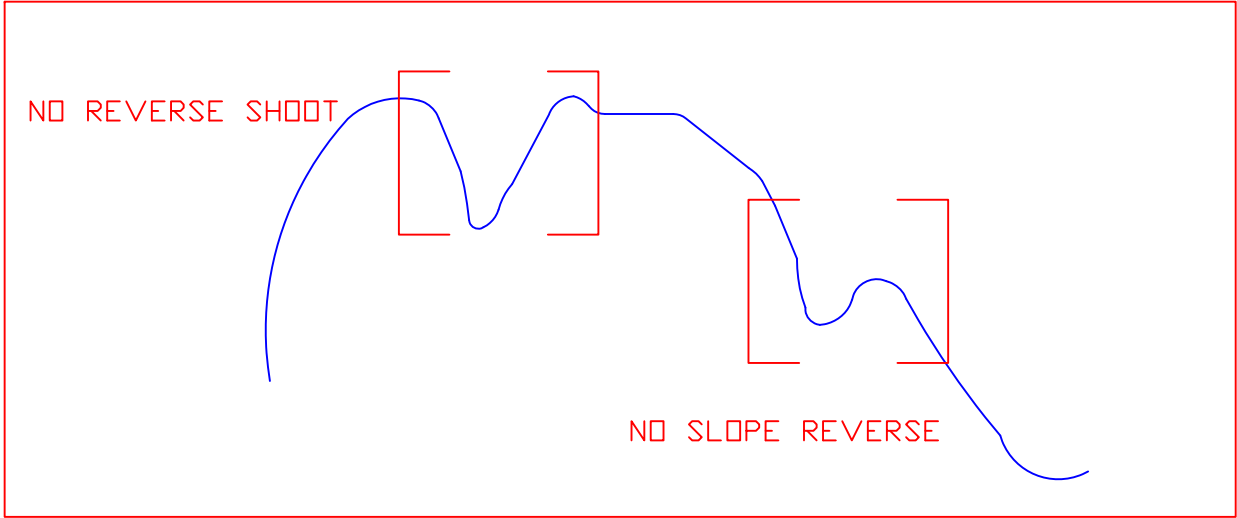


FIGURE 1: REVERSE SLOPE GRAPH

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CHECKED			SIZE A	FSCM NO. 71A34	DWG NO. DWG000131	REV. A4
ISSUED			SCALE N:S		SHEET 2 OF 2	