

DESCRIPTION

PMI MODEL DLVA HADA-D2001 IS A DETECTOR LOG VIDEO AMPLIFIER (DLVA) THAT OPERATES BETWEEN THE 500MHz TO 2000MHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 40 dB, A LOG SLOPE OF 50mV/dB, AND A NOMINAL VIDEO BANDWIDTH OF 20MHz. 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 - 2.0GHz
- TSS -44dBm MIN. @-40°C TO +85°C
- FREQ. FLATNESS ±0.75dB MAX
- INPUT/OUTPUT CHARACTERISTIC (93 OHM)- $Y=2350 + 50X$
[X: INPUT(dBm), Y: OUTPUT (mv)]
- LOGGING ACCURACY ±1.4dB MAX (@+25°C, 1.0GHz) *
[-40dBm ≤ INPUT ≤ 0dBm]
±2.2dB 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 2.5:1 MAX @+23dBm
- PROPAGATION DELAY 60n SEC MAX
- POWER SUPPLY +12VDC ±1VDC @ 100mA MAX
- WARM UP TIME 2 MINUTES MAX
- MECHANICAL REQUIREMENTS SIZE: PER FIGURE.
WEIGHT: 150 GRAMS MAX.
- *NOTES: INCLUDES FREQ. FLATNESS. INPUT POWER, TEMPERATURE DEVIATION
DEVIATION AND DEVIATION FOR DC OFFSET. THE TEST SHALL BE PERFORMED
USING RG-316 (OR EQUIV.), 20cm, 93±0.5 OHMS TERMINATED.

ENVIRONMENTAL RATINGS

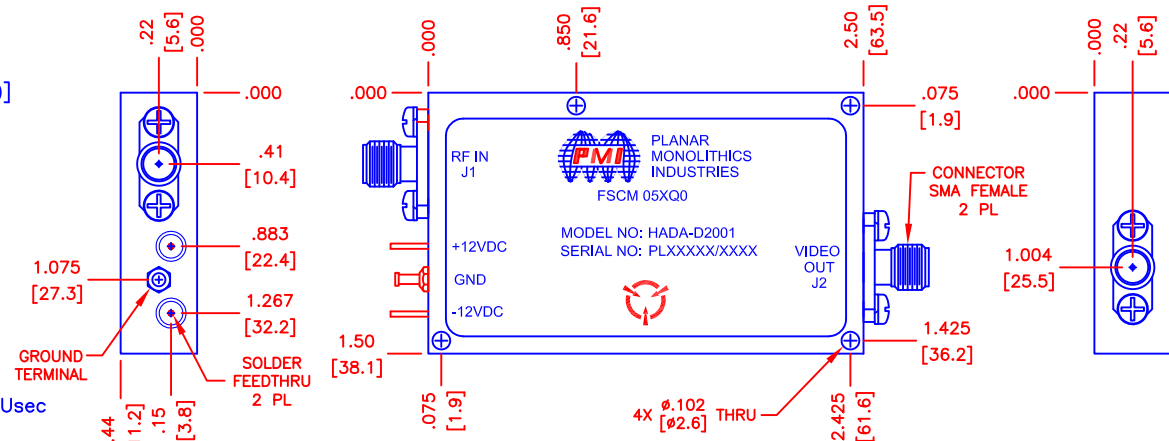
- TEMPERATURE: -40°C TO + 85°C (OPERATING)
-57°C TO +85°C (STORAGE)
- HUMIDITY: 90% TO 98% RH MIL-STD-202F, METHOD 106
- SHOCK: 30G, MIL-STD-202F, METHOD 213 COND. C
- VIBRATION: 10 TO 55Hz (0.06DA), 55 TO 2000Hz (10G)
MIL-STD-202F, METHOD 204 COND.C
- ALTITUDE: 20,000 FEET, MIL-STD-202F, METHOD 105
- 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
	A	ORIGINAL RELEASE	10/01/13	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE PRODUCT FEATURE DLVA HADA—D2001				
DRAWN J. LUDDEN		10/01/13					
CHECKED							
ISSUED				SIZE A	FSCM NO. 05XQ0	DWG NO. DWG000129	REV A
				SCALE N:S		SHEET 1 OF 1	