

LASER COMPONENTS (UK) LTD

4 Gloucester Avenue,
Chelmsford,
Essex CM2 9LD
Telephone: +44 1245 491 499
Fax: +44 1245 491 801



Laser Driver LCVCX1

Specification

Output Current

Current range
Temperature drift (int. references)
Noise
Source capacitance

Pin 5 (Laser Anode)

0-30 mA
35 ppm typ.; 50 ppm Max. /°C
0.4 μ A r.m.s. at 6MHz bandwidth
40 pF

Output Current Control (linear):

A: by external DC
B: by external DC and AC modulation
Sensitivity (span)
Span error
Nonlinearity
Slew rate

Pin 4

remove potentiometer VR1, if fitted
remove capacitor C4 and VR1, if fitted
6 mA/VDC, max. 5V (30mA)
+/- 0.2%
0.01%/°C of span
1.3 mA/ μ s, (max. ca. 25kHz at 20 mA sine wave)
prevent negative signals ref. to ground!

Input resistance

C: by internal control (DC operations only)

ca. 20 kOhm

Solder a potentiometer VR1 – 10 kOhm, 20 turn, max. 100 ppm, i.e. BOURNS type 3296w or x, solder C4 (470 nF) if removed, see fig 2
0 °C to +50 °C

Operating ambient temperature

Power supply

Voltage
Current

Pin 2

+15 VDC (13.5 – 15.75 VDC)
quiescent 6.5 mA, max. 36 mA

Chopper (1005 modulation)

Frequency
Input
Logical low (default)
Fall time
Rise time:
Non capacitive load
with 100 pF/10 mA load

Pin 1

DC to max. 5 MHz, 100% modulation
TTL/CMOS, (AC impedance 300 Ohms, DC 10 kOhm)
laser on
10 ns
20 ns
30 ns

Common ground

To ensure performance connect the laser cathode *directly* to the negative ground of power supply.

Fig.1 Electrical Connections

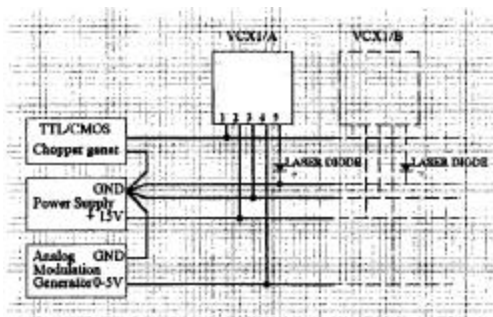


Fig.2 mechanical Dimensions

