Pletronics, Inc. 19013 36th Ave. West • Suite H • Lynnwood, WA 98036, USA

LV1145B LVDS Series

- 6 Pad Leadless Surface Mount Low Voltage Differential Signal Oscillator
- LVDS Output with Enable/Disable
- Higher Frequencies Are Available



70.00 MHz - 650.00 MHz

Consult factory for higher frequencies

Standard Specifications

Overall Frequency Stability Operating Temperature Range Operable Supply Voltage (Vcc)

Supply Current (Icc)

Jitter

Output Load

Enable/Disable Option (E/D) 70 to 170 MHz only

Output Waveform

LVDS with Differential Output (See Waveform 2)

LV1145B: ± 50 PPM, LV1144B: ± 25 PPM, LV1120B: ± 20 PPM over Operating Temp. Range

0 to +80 °C is standard, can be extended to -40 to +85 °C for certain frequencies

 $3.3 \text{ V} \pm 10\%$ standard, 5.0 V or 2.5 V also available

1 pS RMS maximum, from 12 kHz to 20 MHz from carrier

 $R_1 = 100 \Omega$ maximum. See Test Circuit 6

 $C_1 = 10 pF maximum$

40 mA maximum

(Scope with 10 pF maximum probe from VoD+ to GND and VoD- to GND)

Output enabled when Pin #2 is open or at CMOS Logic "1": Output disabled when Pin #2 is at CMOS Logic "0".

45/55% to 55/45% at 1.25 volt level Symmetry

Tr & Tf 1.0 nS max (20 to 80%)

Steady-State 1.125 to 1.375 volts Common Mode

Differential Output 0.247 volts to 0.470 volts pk to pk

Part Numbering Guide

Packaging Tube or 24mm tape 16mm pitch

LV11 45 B Y -- 70.0M Model -Frequency Stability - $45 = \pm 50 \text{ PPM}$ $44 = \pm 25 PPM$

 $20 = \pm 20 \text{ PPM}$

Frequency in MHz

Special Specifications (choose all that apply) E: Extended Operating Temp Range (-40 to +85°C)

V: Supply Voltage of 3.3 volts ±10% W: Supply Voltage of 2.5 volts ±5% Y: Supply Voltage of 5.0 volts ±10%

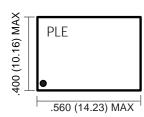
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned. Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

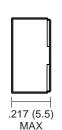
Mechanical: inches (mm)

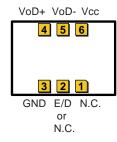
not to scale

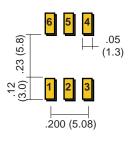
Solder Pads

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.









May 2002