LVPECL Voltage Controlled Crystal Oscillator

CVPD-037X Model
5×7 mm SMD, 3.3V, LVPECL

Frequency Range: 40,000 to 170,000 MHz
Operating Temperature Range: -40°C to 85°C
Storage Temperature Range: -45°C to 90°C
Input Voltage: 3.3V ± 5%
Control Voltage: 1.65V ± 1.65V
Input Current: 56mA Max
Standby Current: 800uA
Output: PECL
Symmetry: 45/55% Max @ zero crossing point
Rise/Fall Time: 0.25ns Typical, 0.5ns Max, (20% to 80%)
Pullability APR: ±50ppm Min APR
Load: 50 ohms (Vdd-2.0V)
Logic “1” Level: 2.275 VDC Min
Logic “0” Level: 1.680 VDC Max
Modulation BW: 15 kHz Min
Input Impedance: 5 Mohm Min
Enable Delay Time: 2 ms Max
Disable Delay Time: 200 ns Max
Phase Noise (Typical for 160 MHz):
10 Hz Offset: -60 dBC/Hz
100 Hz Offset: -90 dBC/Hz
1 kHz Offset: -118 dBC/Hz
10 kHz Offset: -134 dBC/Hz
100 kHz Offset: -144 dBC/Hz
1 MHz Offset: -150 dBC/Hz
10 MHz Offset: -157 dBC/Hz
40 MHz Offset: -157 dBC/Hz

Dimensions inches (mm)
All dimensions are Max unless otherwise specified.

CVPD-037X

0.071 SQ (1.80)
0.046 ±0.008 (1.17 ±0.20)

0.100 (2.54)
0.200 (5.08)

0.71 ±0.008 (1.80 ±0.20)
Denotes pad 1
YYWW=Date Code
XX=Lot Code

Part Number Example: CVPD-037X-100.000 = 3.3V, ±50ppmAPR, 100 MHz

SUGGESTED PAD LAYOUT

0.01µF via to ground

Enable/Disable

<table>
<thead>
<tr>
<th>PIN</th>
<th>Connection</th>
<th>Function pin 2</th>
<th>Output pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cont. Volt</td>
<td>E/D</td>
<td>Active</td>
</tr>
<tr>
<td>2</td>
<td>E/D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>4</td>
<td>Output</td>
<td></td>
<td>High Z</td>
</tr>
<tr>
<td>5</td>
<td>Comp Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Vcc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available on 16mm Tape and Reel in quantities of 1,000 pcs.

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