

TCXO

PT145B Series

PECL/LVDS

6PAD SMD PACKAGE

* PART NUMBERING GUIDE

PT145BH - 5 P 10 3 D E - 20.000M

PT145B : without Trimmer
 PT145BH : with Trimmer
 Supply Voltage
 5 : 5.0V
 3 : 3.3V
 Output
 P : PECL
 L : LVDS
 Stability vs. Temperature See Table1
 Temperature Range Table2
 Frequency M : MHz
 E : 1PIN E/D
 Blank : 1PIN NC

MECHANICAL DIMENSIONS	ELECTRICAL SPECIFICATION																																														
<p>PIN CONNECTION</p> <ul style="list-style-type: none"> #1 N.C or E/D #2 N.C #3 GND #4 OUTPUT #5 COMP.OUTPUT #6 Vcc <p>Recommended Soldering Pattern</p>	<table border="1"> <tr> <td>Frequency range</td> <td>0.75MHz to 800.000MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory.</td> </tr> <tr> <td>Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging</td> <td>±0.5 ppm to ±5.0ppm ±0.1 / ±0.3 ppm max / Vdd ± 5% ±0.2 ppm max /15pF ±10% ±1.0 ppm max/ year</td> </tr> <tr> <td>Temperature Range Operating Storage</td> <td>See Table 2 -55°C to 125°C</td> </tr> <tr> <td>Supply Voltage</td> <td>3.3V ± 5% 5.0V ± 5%</td> </tr> <tr> <td>Input Current 3.3 V , 5V</td> <td>24.000MHz ~ 800.000MHz 25mA max ~ 100mA max</td> </tr> <tr> <td>Output characteristics</td> <td> <table border="1"> <thead> <tr> <th></th> <th>pecl</th> <th>lvds</th> </tr> </thead> <tbody> <tr> <td>Voh Logic "1"</td> <td>Vdd-1.025v min.</td> <td>1.43v typ.</td> </tr> <tr> <td>Vol Logic "0"</td> <td>Vdd-1.620v max.</td> <td>1.10v typ.</td> </tr> <tr> <td>Rise Time Tr</td> <td>1.0 nsec max.</td> <td>1.0 nsec max.</td> </tr> <tr> <td>Fall Time Tf</td> <td>1.0 nsec min.</td> <td>1.0 nsec min.</td> </tr> <tr> <td>Duty Cycle</td> <td>50//50 ± 5%</td> <td>50//50 ± 5%</td> </tr> <tr> <td>Differential Output Vod(Lvds)</td> <td></td> <td>330mV typ.</td> </tr> <tr> <td>Offset Voltage Vos(Lvds)</td> <td></td> <td>1.2V typ.</td> </tr> </tbody> </table> </td> </tr> <tr> <td>Phase Noise (typical) 20MHz offset</td> <td>-80 dBc / Hz @ 10Hz -120 dBc / Hz @ 100Hz -135 dBc / Hz @ 1KHz -140 dBc / Hz @ 10KHz -145 dBc / Hz @100KHz</td> </tr> <tr> <td>Frequency Adjustment</td> <td>±3ppm min by internal trimmer (OPTION)</td> </tr> </table>	Frequency range	0.75MHz to 800.000MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory.	Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging	±0.5 ppm to ±5.0ppm ±0.1 / ±0.3 ppm max / Vdd ± 5% ±0.2 ppm max /15pF ±10% ±1.0 ppm max/ year	Temperature Range Operating Storage	See Table 2 -55°C to 125°C	Supply Voltage	3.3V ± 5% 5.0V ± 5%	Input Current 3.3 V , 5V	24.000MHz ~ 800.000MHz 25mA max ~ 100mA max	Output characteristics	<table border="1"> <thead> <tr> <th></th> <th>pecl</th> <th>lvds</th> </tr> </thead> <tbody> <tr> <td>Voh Logic "1"</td> <td>Vdd-1.025v min.</td> <td>1.43v typ.</td> </tr> <tr> <td>Vol Logic "0"</td> <td>Vdd-1.620v max.</td> <td>1.10v typ.</td> </tr> <tr> <td>Rise Time Tr</td> <td>1.0 nsec max.</td> <td>1.0 nsec max.</td> </tr> <tr> <td>Fall Time Tf</td> <td>1.0 nsec min.</td> <td>1.0 nsec min.</td> </tr> <tr> <td>Duty Cycle</td> <td>50//50 ± 5%</td> <td>50//50 ± 5%</td> </tr> <tr> <td>Differential Output Vod(Lvds)</td> <td></td> <td>330mV typ.</td> </tr> <tr> <td>Offset Voltage Vos(Lvds)</td> <td></td> <td>1.2V typ.</td> </tr> </tbody> </table>		pecl	lvds	Voh Logic "1"	Vdd-1.025v min.	1.43v typ.	Vol Logic "0"	Vdd-1.620v max.	1.10v typ.	Rise Time Tr	1.0 nsec max.	1.0 nsec max.	Fall Time Tf	1.0 nsec min.	1.0 nsec min.	Duty Cycle	50//50 ± 5%	50//50 ± 5%	Differential Output Vod(Lvds)		330mV typ.	Offset Voltage Vos(Lvds)		1.2V typ.	Phase Noise (typical) 20MHz offset	-80 dBc / Hz @ 10Hz -120 dBc / Hz @ 100Hz -135 dBc / Hz @ 1KHz -140 dBc / Hz @ 10KHz -145 dBc / Hz @100KHz	Frequency Adjustment	±3ppm min by internal trimmer (OPTION)						
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