

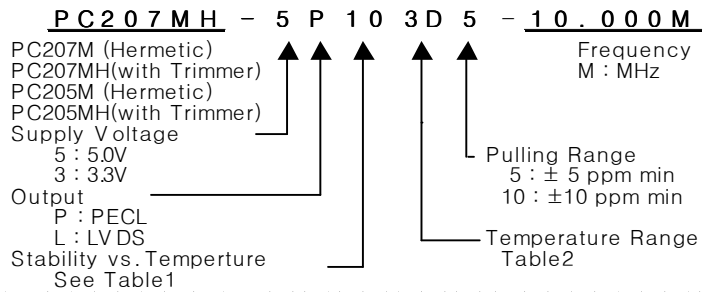
VCTCXO

PC205M/PC207M Series

PECL/LVDS

14PIN DIP PACKAGE

* PART NUMBERING GUIDE



MECHANICAL DIMENSIONS	ELECTRICAL SPECIFICATION																																																
<table border="1" style="margin-top: 10px;"> <tr> <th>TYPE</th> <th>"H" SIZE</th> </tr> <tr> <td>PC205M</td> <td>5.1 MAX</td> </tr> <tr> <td>PC207M</td> <td>7.5 MAX</td> </tr> </table> <p style="margin-top: 10px;">PIN CONNECTION #1 V.C #2 GND #3 OUTPUT #4 Vcc Comp. OUTPUT(OPTION)</p>	TYPE	"H" SIZE	PC205M	5.1 MAX	PC207M	7.5 MAX	Frequency range	0.75MHz to 800.000MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory.																																									
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<h3>OUTPUT WAVEFORM</h3>	Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging	± 0.5 ppm to ± 5.0 ppm $\pm 0.1 / \pm 0.3$ ppm max / $V_{dd} \pm 5\%$ ± 0.2 ppm max / $15\text{pF} \pm 10\%$ ± 1.0 ppm max/ year																																															
	Temperature Range Operating Storage	See Table 2 -55°C to 125°C																																															
<h3>TEST CIRCUIT</h3> <p>PECL Levels Test Circuit</p> <p>LVDS Levels Test Circuit</p>	Supply Voltage	3.3V $\pm 5\%$ 5.0V $\pm 5\%$																																															
	Input Current 3.3 V , 5V	24.000MHz ~ 800.000MHz 25mA max ~ 100mA max																																															
<h3>ENVIRONMENTAL & MECHANICAL SPECIFICATION</h3>	Output characteristics	<table border="1" style="width: 100%; text-align: center;"> <tr> <td></td> <td>pecl</td> <td>lvds</td> </tr> <tr> <td>Voh Logic "1"</td> <td>$V_{dd}-1.025\text{v min.}$</td> <td>1.43v typ.</td> </tr> <tr> <td>Vol Logic "0"</td> <td>$V_{dd}-1.620\text{v max.}$</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 $\pm 5\%$</td> <td>50//50 $\pm 5\%$</td> </tr> <tr> <td>Differential Output</td> <td>Vod(Lvds)</td> <td>330mV typ.</td> </tr> <tr> <td>Offset Voltage</td> <td>Vos(Lvds)</td> <td>1.2V typ.</td> </tr> </table>				pecl	lvds	Voh Logic "1"	$V_{dd}-1.025\text{v min.}$	1.43v typ.	Vol Logic "0"	$V_{dd}-1.620\text{v max.}$	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 $\pm 5\%$	50//50 $\pm 5\%$	Differential Output	Vod(Lvds)	330mV typ.	Offset Voltage	Vos(Lvds)	1.2V typ.																					
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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	± 3 ppm min by internal trimmer (OPTION)																																																
Voltage Control Characteristics																																																	
Output Pulling Range ($\Delta F / \Delta V$)	± 5.0 ppm or ± 10 ppm min ($\Delta F / \Delta V > \pm 20$ ppm is available, please contact us)																																																
Control Voltage Range	1.65V ± 1.5 V ($V_{dd} : 3.3$ V) , 2.5V ± 2.0 V ($V_{dd} : 5.0$ V)																																																
<h3>TABLE1</h3> <table border="1" style="width: 100%;"> <tr> <th>Symbol</th> <th>Stability</th> </tr> <tr> <td>05</td> <td>± 0.5ppm</td> </tr> <tr> <td>10</td> <td>± 1.0ppm</td> </tr> <tr> <td>15</td> <td>± 1.5ppm</td> </tr> <tr> <td>20</td> <td>± 2.0ppm</td> </tr> <tr> <td>25</td> <td>± 2.5ppm</td> </tr> <tr> <td>30</td> <td>± 3.0ppm</td> </tr> <tr> <td>35</td> <td>± 3.5ppm</td> </tr> <tr> <td>50</td> <td>± 5.0ppm</td> </tr> </table>	Symbol	Stability	05	± 0.5 ppm	10	± 1.0 ppm	15	± 1.5 ppm	20	± 2.0 ppm	25	± 2.5 ppm	30	± 3.0 ppm	35	± 3.5 ppm	50	± 5.0 ppm	<h3>TABLE2</h3> <table border="1" style="width: 100%; text-align: center;"> <tr> <th>Symbol</th> <th>Temp.</th> <th>Symbol</th> <th>Temp.</th> </tr> <tr> <td>0</td> <td>0°C</td> <td>A</td> <td>50°C</td> </tr> <tr> <td>1</td> <td>-10°C</td> <td>B</td> <td>60°C</td> </tr> <tr> <td>2</td> <td>-20°C</td> <td>C</td> <td>70°C</td> </tr> <tr> <td>3</td> <td>-30°C</td> <td>D</td> <td>75°C</td> </tr> <tr> <td>4</td> <td>-40°C</td> <td>E</td> <td>80°C</td> </tr> <tr> <td></td> <td></td> <td>F</td> <td>85°C</td> </tr> </table>			Symbol	Temp.	Symbol	Temp.	0	0°C	A	50°C	1	-10°C	B	60°C	2	-20°C	C	70°C	3	-30°C	D	75°C	4	-40°C	E	80°C			F	85°C
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