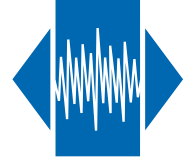


# MCO-3S-PE-6p

SMD Clock Oscillator  
LVPECL

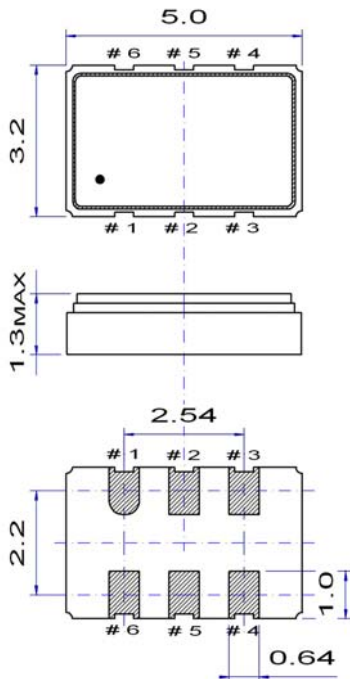
QuartzCom  
the communications company



## Features

- Applications: 10 Gigabit Ethernet, SDH, SONET, Fibre Channel broadband access, DSL, GPON and switching system
- Output frequency up to 212.5 MHz
- Low jitter < 0.5 ps
- Small package size: 5.0 x 3.2 x 1.3 mm

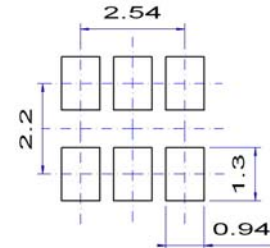
| Parameter   | Specification   |  |
|---|---|--|
|   | MCO-3S25-PE-6p  | MCO-3S3-PE-6p  |
| Frequency range   | 20 ~ 212.5 MHz  |  |
| Standard frequencies  | 106.25, 120.00, 122.88, 125.00, 153.60, 155.52, 156.250, 159.375<br>161.1328, 200.00 & 212.50 MHz |  |
| Supply voltage  | +2.5 V $\pm$ 5 %  | +3.3 V $\pm$ 5 %   |
| Output signal   | LVPECL  |  |
| Output voltage  | $V_{OH} \geq 1.475$ V $V_{OL} \leq 1.095$ V   | $V_{OH} \geq 2.275$ V $V_{OL} \leq 1.680$ V                                  |
| Output load   | 50 $\Omega$ to Vdc -2.0 V   |  |
| Supply current  | 40 ~ 85 mA  |  |
| Frequency stability (*)   | < $\pm$ 25 ppm<br>< $\pm$ 50 ppm  | over -20 ~ +70 $^{\circ}$ C<br>over -40 ~ +85 $^{\circ}$ C                   |
| Jitter (rms)  | < 0.5 ps @ 12 kHz ~ 20 MHz from carrier frequency   |  |
| Symmetry  | 45 ~ 55 %   | @ 1/2 Vdc  |
| Rise / Fall time  | < 0.5 ns  | 20 to 80 % of amplitude  |
| Tri-state function  | pin #1 = high or open<br>pin #1 = low   | pin #4 & #5 $\rightarrow$ signal<br>pin #4 & #5 $\rightarrow$ high impedance |
| Operating temperature range   | -20 ~ +70 $^{\circ}$ C<br>-40 ~ +85 $^{\circ}$ C  | commercial application<br>industrial application                             |
| Storage temperature range   | -55 ~ +125 $^{\circ}$ C   |  |
| Packaging units   | tape & reel   | 1'000 pcs  |
| (*) All inclusive: frequency stability vs. temperature, tolerance, aging, supply & load variation, on request |   |  |
| Customer specifications on request  |   |  |



## Pin function

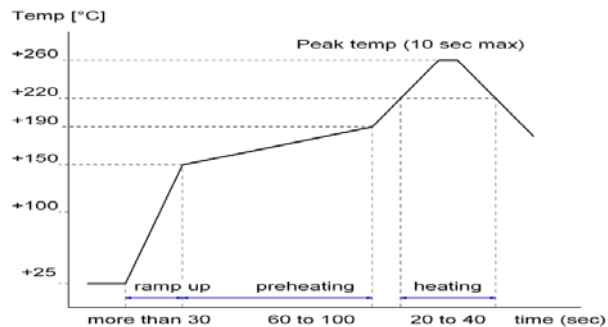
- # 1 Tri-state or not connected
- # 2 not connected
- # 3 GND
- # 4 Output
- # 5 Complementary output
- # 6 Vdc

## Example for solder pattern



Do not design any conductive path between the pattern

## Example for IR reflow soldering temperature



2002/95/EC RoHS compliant