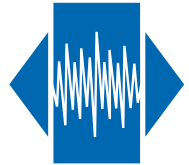


# MCO-5S-P

SMD Clock Oscillator  
Programmable

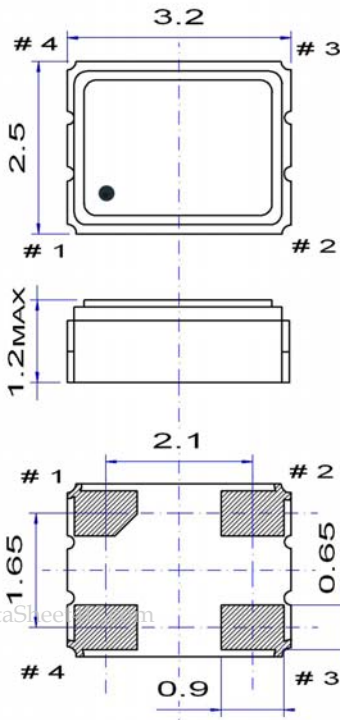
QuartzCom  
the communications company



## Features

- Small package 3.2 x 2.5 mm
- Output signal CMOS
- Programmable wide frequency range
- Short lead time for samples: 1 week max.

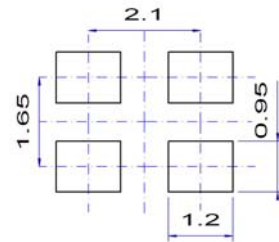
| Parameter                   | Specification  |  |                                    |
|-----------------------------|--|--|------------------------------------|
|                             | MCO-5S18P  | MCO-5S25P  | MCO-5S3P                           |
| Frequency range             | 1 MHz ~ 133 MHz  | 1 MHz ~ 166 MHz                                  | 1 MHz ~ 200 MHz                    |
| Supply voltage              | +1.8 V ±10 %   | +2.5 V ±10 %                                     | +3.3 V ±10 %                       |
| Supply current              | 1 ~ 75 MHz<br>76 ~ 133 MHz<br>134 ~ 166 MHz<br>167 ~ 200 MHz   | < 8 mA<br>< 12 mA<br>-<br>-                      | < 10 mA<br>< 15 mA<br>< 15 mA<br>- |
| Frequency stability         | ±25 ~ ±50 ppm  |  |                                    |
| all inclusive:              | frequency stability, tolerance, aging, supply & load variation |  |                                    |
| Output signal               | CMOS   |  |                                    |
| Output level                | $V_{OH} \geq 0.9 \text{ Vdc}$                                  |  | $V_{OL} \leq 0.1 \text{ Vdc}$      |
| Output load                 | 15 pF ~ 25 pF  |  |                                    |
| Jitter (rms)                | < 10 ps  | @ 12 kHz ~ 20 MHz from carrier frequency         |                                    |
| Symmetry                    | 45 ~ 55 %  | @ ½ Vdc  |                                    |
| Rise/Fall time              | 4 ~ 10 ns  |  |                                    |
| Tri-state function          | pin #1 = high or open<br>pin #1 = low                          | pin #3 → signal<br>pin #3 → high impedance       |                                    |
| Operating temperature range | -20 ~ +70 °C<br>-40 ~ +85 °C                                   | commercial application<br>industrial application |                                    |
| Storage temperature range   | -55 ~ +125 °C  |  |                                    |
| Packaging units             | tape & reel<br>tape only                                       | 1'000 or 2'500 pieces<br>< 500 pieces            |                                    |



## Pin function

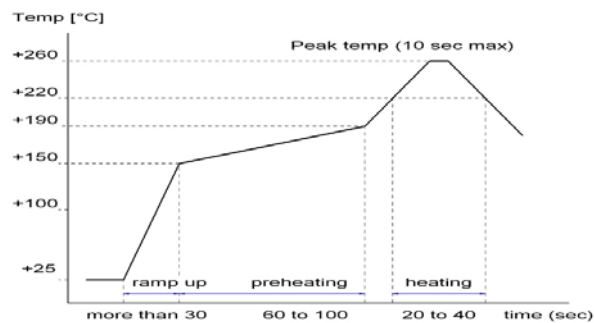
- # 1 Tri-state
- # 2 GND
- # 3 Output
- # 4 Vdc

## Example for solder pattern



Do not design any conductive path between the pattern

## Example for IR reflow soldering temperature



2002/95/EC RoHS compliant

31 Mar. 10

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