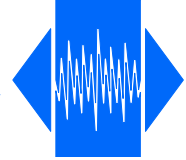


# MCO-1S

SMD Clock Oscillator  
HCMOS / TTL

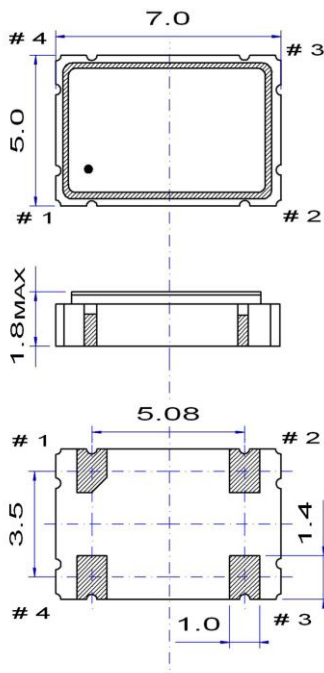
QuartzCom  
the communications company



## Features

- Applications: telecommunications, instrumentation, automotive
- Output frequency up to 200 MHz
- Low phase jitter < 1.0 ps
- Highly shock and vibration resistant

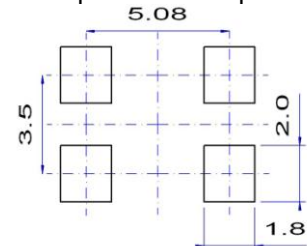
Parameter	Specification			
	MCO-1S18	MCO-1S25	MCO-1S3	MCO-1S5
Frequency range	12 kHz ~ 200 MHz			0.012 ~ 110 MHz
Standard frequencies	11.0592, 20, 25.0, 40.0, 44.0, 80.0, 106.25 & 125 MHz			20, 40 & 80 MHz
Supply voltage	+1.8 V $\pm$ 5 %	+2.5 V $\pm$ 5 %	+3.3 V $\pm$ 10 %	+5.0 V $\pm$ 10 %
Supply current	0.03 ~ 70 MHz	< 20 mA	< 25 mA	< 30 mA
	71 ~ 125 MHz	< 25 mA	< 30 mA	< 35 mA
	126 ~ 200 MHz	< 30 mA	< 35 mA	< 45 mA
Frequency stability (*)	$\pm$ 25 ~ $\pm$ 50 ppm			
Output signal	HCMOS / TTL compatible			
Output level	$V_{OH} \geq 0.9 V_{dc}$		$V_{OL} \leq 0.1 V_{dc}$	
Output load	15 pF ~ 25 pF		15 pF ~ 50 pF	
Jitter (rms)	< 1 ps @ 12 kHz ~ 20 MHz from carrier frequency			
Symmetry	45 ~ 55 %		@ 1/2 Vdc	
Rise / fall time	3 ~ 8 ns			
Tri-state function	pin #1 = high or open pin #1 = low		pin #3 $\rightarrow$ signal pin #3 $\rightarrow$ high impedance	
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C -55 ~ +125 °C		commercial application industrial application automotive & avionic applic.	
Storage temperature range	-55 ~ +125 °C			
Packaging units	tape & reel		500 or 1.000 pieces	
(*) All inclusive: frequency stability vs. temperature, tolerance, aging, supply & load variation				
Customer specifications on request				



## Pin function

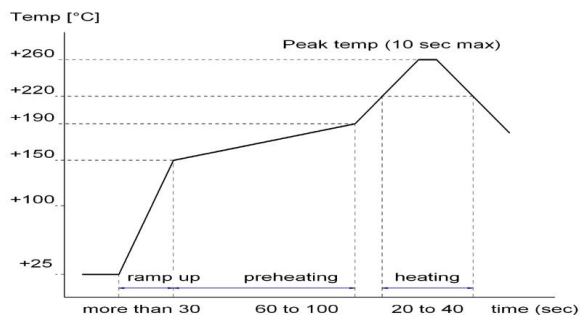
- # 1 Tri-state
- # 2 GND
- # 3 Output
- # 4 Vdc

## Example for solder pattern



Do not design any conductive path between the pattern

## Example for IR reflow soldering temperature



2002/95/EC RoHS compliant

20 Apr. 10

QuartzCom AG  
sales@quartzcom.com

QuartzCom Asia  
sales-asia@quartzcom.com

QuartzCom USA  
sales-usa@quartzcom.com

[www.quartzcom.com](http://www.quartzcom.com)