

# MCO-1S-PEM-6p

SMD Clock Oscillator  
LVPECL

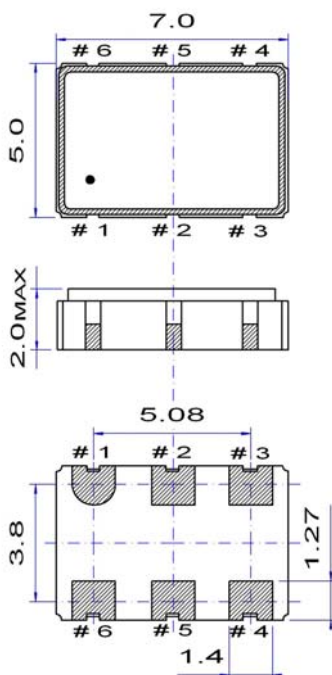
QuartzCom  
the communications company



## Features

- Applications: wireless communications, 10 Gigabit Ethernet Fibre Channel, broadband access, DSL, GPON
- Output frequency up to 700 MHz
- Low jitter < 3.0 ps

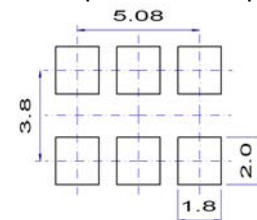
Parameter	Specification	
	MCO-1S25-PEM-6p	MCO-1S3-PEM-6p
Frequency range	100 ~ 450 MHz	100 ~ 700 MHz
Standard frequencies	155.52, 156.25, 159.375, 161.1328, 164.355469, 200.0, 212.5 240.0, 250.0, 312.5, 320.0, 350.0, 347.0 MHz	
	> 450 MHz under development	491.0 & 622.08 MHz
Supply voltage	+2.5 V $\pm$ 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
Supply current	65 ~ 100 mA	
Frequency stability (*)	$\pm$ 25 ppm $\pm$ 50 ppm	over -20 ~ +70 °C over -40 ~ +85 °C
Output load	50 $\Omega$	to Vdc -2.0 V
Jitter (rms)	< 3 ps @ 12 kHz ~ 20 MHz from carrier frequency	
Symmetry	45 ~ 55 %	@ 1/2 Vdc
Rise / Fall time	< 1 ns	20 to 80 % of amplitude
Tri-state function	pin #1 = high or open pin #1 = low	pin #4 & #5 $\rightarrow$ signal pin #4 & #5 $\rightarrow$ high impedance
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C	commercial application industrial application
Storage temperature range	-55 ~ +125 °C	
Packaging unit	tape & reel	1'000 pieces
(*) All inclusive:	frequency stability vs. temperature, tolerance, aging, supply & load variation	
Customer specifications on request		



## Pin function

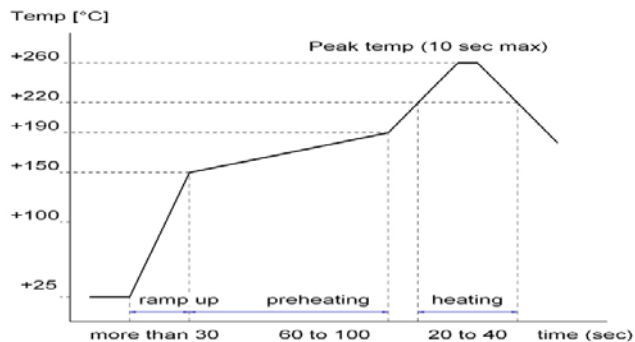
- # 1 Tri-state or not connected
- # 2 not connected or Tri-state
- # 3 GND
- # 4 Output
- # 5 Complementary output
- # 6 Vdc

## Example for solder pattern



Do not design any conductive path between the pattern

## Example for IR reflow soldering temperature



2002/95/EC RoHS compliant