

# MCO-1S-DS-6p

SMD Clock Oscillator  
LVDS

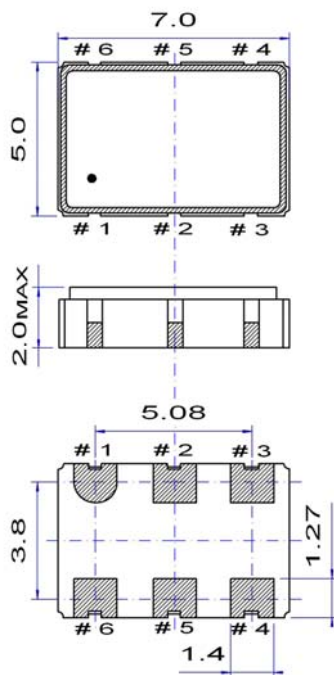
QuartzCom  
the communications company



## Features

- Applications: 10 Gigabit Ethernet, SDH, SONET, Fibre Channel broadband access, DSL, GPON and switching system
- Output frequency up to 320 MHz
- Low jitter < 0.5 ps

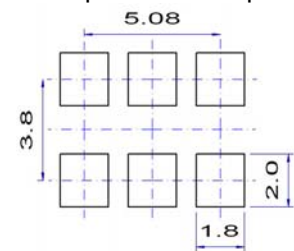
Parameter	Specification	
	MCO-1S25-DS-6p	MCO-1S3-DS-6p
Frequency range	20 ~ 320 MHz	
Standard frequencies	77.76, 106.25, 125.0, 155.52, 156.25, 159.375, 161.1328, 164.355469, 187.5, 212.5, 250.0 & 312.5 MHz	
Supply voltage	+2.5 V $\pm$ 5 %	+3.3 V $\pm$ 5 %
Output signal	LVDS	
Output voltage	$V_{OH} \leq 1.60$ V $V_{OL} \geq 0.9$ V	$V_{OH} \leq 1.60$ V $V_{OL} \geq 0.9$ V
Output load	100 $\Omega$	
Supply current	30 ~ 70 mA	
Frequency stability (*)	$\pm$ 25 ppm $\pm$ 50 ppm	over -20 ~ +70 $^{\circ}$ C over -40 ~ +85 $^{\circ}$ C
Jitter (rms)	< 0.5 ps @ 12 kHz ~ 20 MHz from carrier frequency	
Symmetry	45 ~ 55 % @ $\frac{1}{2}$ 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 $^{\circ}$ C -40 ~ +85 $^{\circ}$ C	commercial application industrial application
Storage temperature range	-55 ~ +125 $^{\circ}$ 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

