

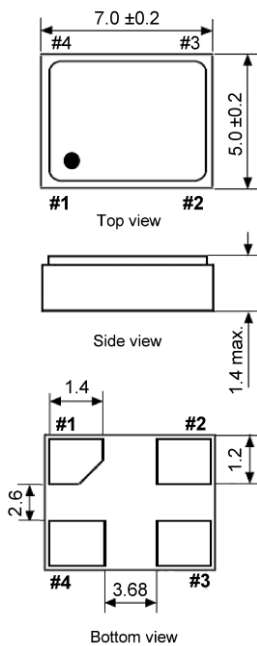


# Clock Oscillator SMD-version

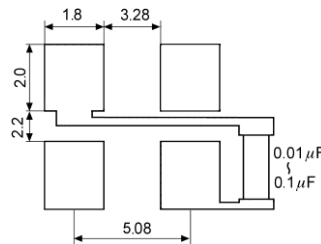
+5.0 V

part no.	12.xxxxx				
model	KXO-97				
frequency range	1.0 ~ 39.999 MHz	40.0 ~ 59.999 MHz	60.0 ~ 69.999 MHz	70.0 ~ 79.999 MHz	80.0 ~ 160.0 MHz
frequency stability at -20° ~ +70°C; -40° ~ +85°C -40° ~ +105°C; -40° ~ +125°C	±25 ppm, ±50 ppm ±30 ppm; ±50 ppm; ±100 ppm				
operating temperature	standard -20° ~ +70°C available -40° ~ +85°C (=KXO-97T); -40° ~ +105°C (=KXO-97E); -40° ~ +125°C (=KXO-97F)				
storage temperature	-55° ~ +125°C				
supply voltage V <sub>DD</sub>	standard + 5.0 V DC ± 10 %				
supply current max.	1.0 ~ 39.999 MHz		20 mA		
	40.0 ~ 59.999 MHz		30 mA		
	60.0 ~ 69.999 MHz		50 mA		
	70.0 ~ 79.999 MHz		50 mA		
	80.0 ~ 160.0 MHz		60 mA		
symmetry	45 % ~ 55 % at 50 % V <sub>DD</sub> level				
rise & fall time max.	5 ns				
"O" level max.; "1" level min.	VOL: 10 % V <sub>DD</sub> ; VOH: 90 % V <sub>DD</sub>				
tri-state control voltage (Pin#1)	VIH: V <sub>DD</sub> x 0.7 min.; VIL: V <sub>DD</sub> x 0.3 max.				
output load	1.0 ~ 33.0 MHz 50 pF 33.1 ~ 75.0 MHz 30 pF 75.1 ~ 160.0 MHz 15 pF				
start up time max.	10 ms				
disable/enable delay time max	50 µs /4ms				
standby current max.	50 µA (Pin #1=VIL)				
Jitter max.	deterministic jitter	5 ps	norm 1-sigma	7 ps	
	random jitter	7 ps	peak to peak	40 ps	
contents of reel	1000 pcs.				

### Dimensions (mm):



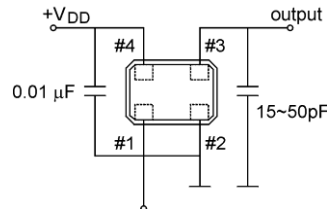
### Suggested soldering pad:



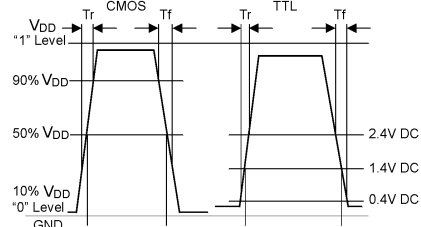
PIN	Connection
1	"L" (0V) "H" or OPEN
2	GND
3	Z OUTPUT
4	V <sub>DD</sub>

Z: high impedance

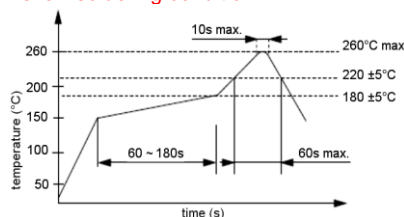
### Test circuit:



### Output waveform:



### Reflow soldering condition:



### Tape specification:

