



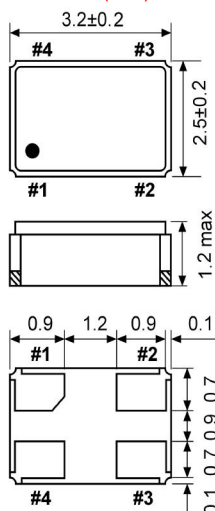
## Clock Oscillator SMD-version

+1.8 / +2.5 / +2.8 / +3.0 / +3.3V

part no.	12.xxxxx			
model	KXO-V96			
frequency range	1.0 ~ 133.0 MHz			
frequency stability at -20° ~ + 70°C at -40° ~ + 85°C at -40° ~ +105°C	± 50 ppm ±100 ppm ±120 ppm			
operating temperature	standard -20° ~ + 70°C available -40° ~ + 85°C (=KXO-V96T) available -40° ~ +105°C (=KXO-V96E)			
storage temperature	-50° ~ +125°C			
supply voltage range	-0.5V ~ +7.0V			
input voltage V <sub>DD</sub>	+1.8V DC ±5%, +2.5V DC ±5%, +2.8V DC ±5%, +3.0V DC ±5% or +3.3V DC ±5%			
input current		+1,8V	+2,5V	+3,0V/+3,3V
	1.0 ~ 20.0MHz	3.5 mA typ., 6.0 mA max.	4.0 mA typ., 6.0 mA max.	4.0 mA typ., 6.0 mA max.
	20.1 ~ 50.0MHz	4.5 mA typ., 6.0 mA max.	4.0 mA typ., 11.0 mA max.	6.0 mA typ., 11.0 mA max.
	50.1 ~ 80.0MHz	6.0 mA typ., 11.0 mA max.	6.0 mA typ., 11.0 mA max.	9.0 mA typ., 16.0 mA max.
	80.1 ~ 133.0MHz	15 mA typ., 20 mA max.	20 mA typ., 40 mA max.	20 mA typ., 40 mA max.
symmetry	40% ~ 60% at ½ V <sub>DD</sub> level			
rise & fall time max.	5 ns (10% V <sub>DD</sub> ~ 90% V <sub>DD</sub> level)			
"0" level max.	VOL: 10% V <sub>DD</sub>			
"1" level min.	VOH: 90% V <sub>DD</sub>			
stand-by control voltage (pin#1)	VIH(min): 70% V <sub>DD</sub> VIL(max): 30% V <sub>DD</sub> *			
output load max.	15pF HCMOS			
start up time max.	10 ms			
disable delay time max.	150 ns			
enable delay time max.	10 ms			
stand by current max.*	50 µA (Pin #1=VIL)			
jitter	deterministic jitter	5ps max.	norm 1-sigma	7ps max.
	random jitter	7ps max.	peak to peak	40ps max.
contents of reel	1000 pcs.			

\* Internal crystal oscillation to be halted (pin#1=VIL)

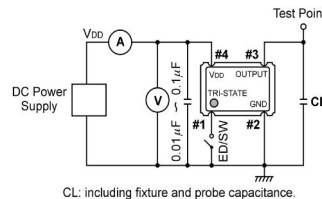
### Dimensions (mm):



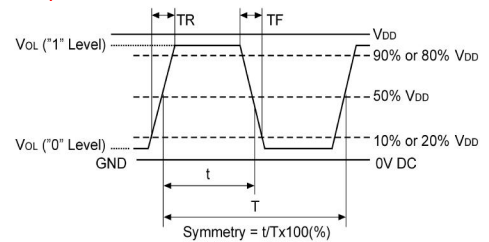
PIN	CONNECTION
1	"L" OPEN or "H"
2	GND
3	OUTPUT
4	V <sub>DD</sub>

Z: high impedance

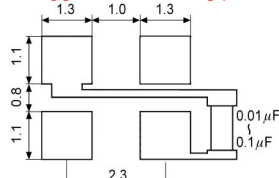
### Test circuit:



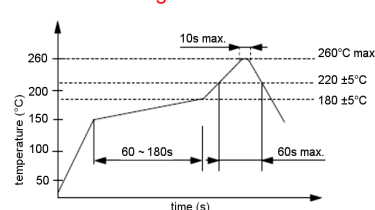
### Output waveform:



### Suggested soldering pad:



### Reflow soldering condition:



### Tape specification:

