



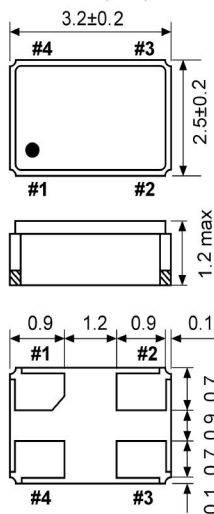
## Clock Oscillator SMD-version

+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	+1.8V ~ +3.3V		
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. peak to peak
	random jitter	7ps max.	40ps max.
contents of reel	1000 pcs.		

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

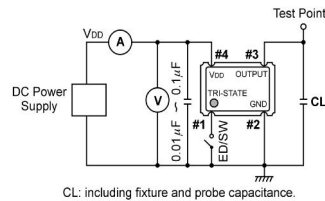
### Dimensions (mm):



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

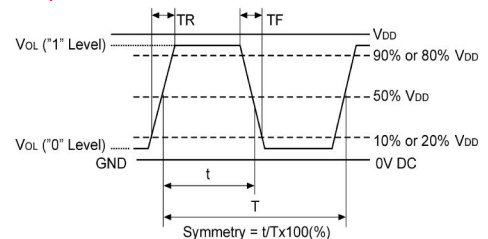
Z: high impedance

### Test circuit:

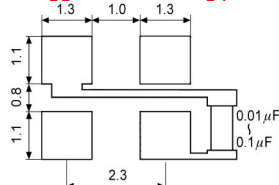


CL: including fixture and probe capacitance.

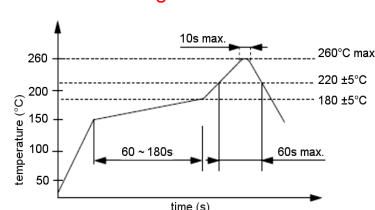
### Output waveform:



### Suggested soldering pad:



### Reflow soldering condition:



### Tape specification:

