



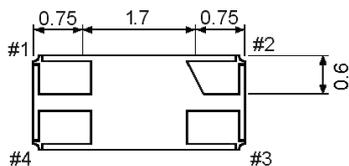
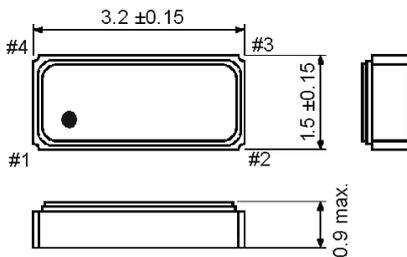
## Clock Oscillator SMD-version

+2.5V / +3.3V

part no.	12.xxxxx
model	KXO-V32T
frequency	32.768 kHz
frequency tolerance at +25°C	±3 ppm
frequency stability max. at -40° ~ +85°C	±20 ppm max, ±10 ppm typ.
operating temperature	-40° ~ +85°C
storage temperature	-55° ~ +125°C
symmetry	50% ± 10% at 15 pF load
rise & fall time max.	50 ns at output level 20 ~ +80% with 15 pF load
"O" level max.	VOL: 0.4V IOL 0.4 mA at V <sub>DD</sub> 2.0V
"1" level min.	VOH: V <sub>DD</sub> -0.4V IOH -0.4 mA at V <sub>DD</sub> 2.0V
input voltage V <sub>DD</sub>	+2.5V DC ±5% and +3.3V DC ±5%
tri-state control voltage (Pin#1)	VIH: V <sub>DD</sub> x 0.8 min. VIL: V <sub>DD</sub> x 0.2 max.
supply voltage V <sub>DD</sub>	+1.3V ~ +3.5V*
input current max.	1.0µA typ., 2.0µA max., at +3.3V, no load
output load max.	15 pF (HCMOS)
start up time max.	0.5 sec
contents of reel	3000 pcs

\* When the supply voltage drops to 2V or less, the frequency compensation is inactive. The compensation interval is 2 sec.

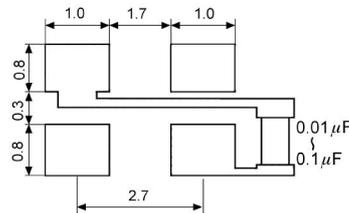
### Dimensions (mm):



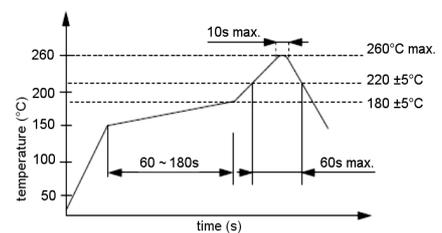
PIN	CONNECTION
1	"L" OPEN or "H"
2	GND
3	Z OUTPUT
4	V <sub>DD</sub>

Z: high impedance

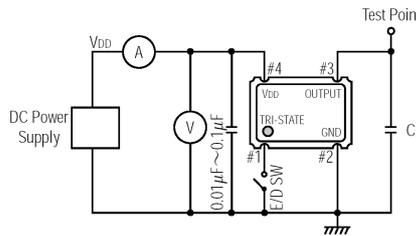
### Suggested soldering pad:



### Reflow soldering condition:

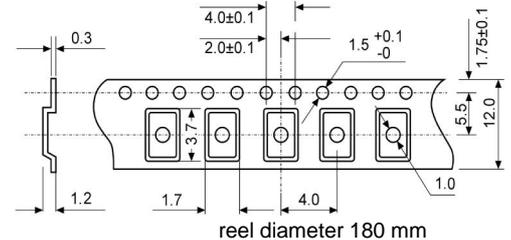


### Test circuit:

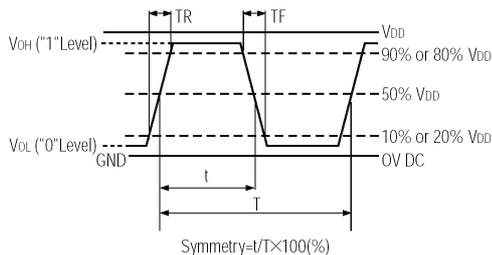


CL : including fixture and probe capacitance.

### Tape specification:



### Output waveform:



### Temperature characteristic (for reference only 3.3V):

