



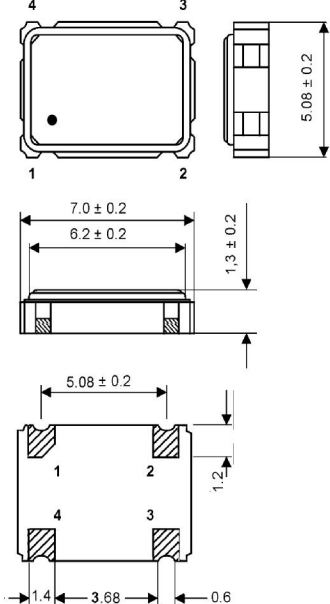
Clock Oscillator

SMD-version

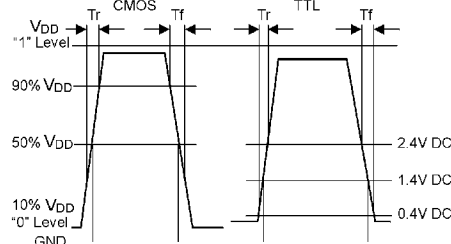
5V

part no.	12.xxxxx
model	KXO-97-kHz
frequency	32.7680 kHz
frequency stability at -20 ~ +70°C at -40 ~ +85°C	± 50 ppm ±100 ppm
operating temperature	standard -20 ~ +70°C available -40 ~ +85°C (=KXO-97T)
storage temperature	-40 ~ +85°C
symmetry	50% ±10% at 1.4V DC level or ½ V _{DD} level
rise & fall time max.	TTL: 6 ns / CMOS: 10 ns
"0" level max.	+0.4V (TTL) +0.5V (CMOS)
"1" level min.	+2.4 (TTL) V _{DD} -0.5V (CMOS)
input voltage V _{DD}	+5V DC ±10%
input current max.	1 mA
output load	10 TTL gates 50 pF
start up time max.	10 ms
tristate function	yes
disable delay time max.	100 ns
enable delay time max.	4 ms
phase jitter	(12 kHz – 20 MHz) with 1 ps
random jitter max.	7ps
peak to peak jitter max.	40ps
contents of reel	1000 pcs.

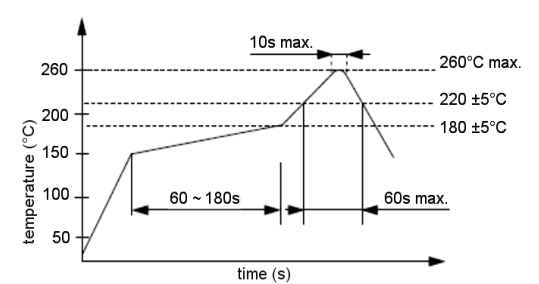
Dimensions (mm):



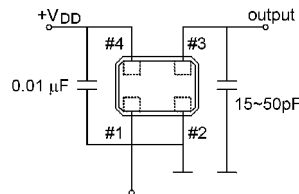
Output waveform:



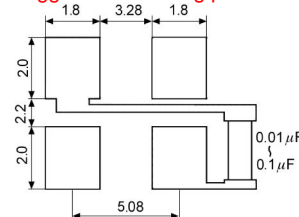
Reflow soldering condition:



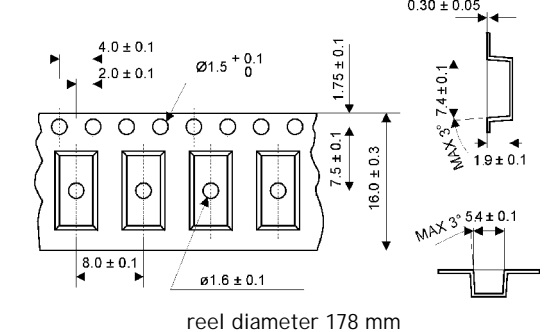
Test circuit:



Suggested soldering pad:



Tape specifications:



PIN	Connection
1	"L" (0V) "H" or OPEN
2	GND
3	Z OUTPUT
4	V _{DD}

Z: high impedance