



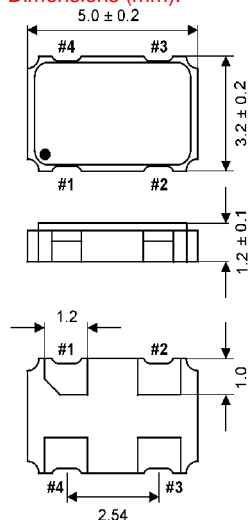
## Clock Oscillator

SMD-version

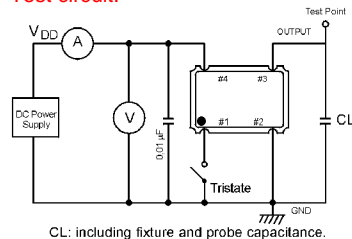
3.3V

part no.	12.94628
model	KXO-V99
frequency	24.0 MHz
frequency stability at -20° ~ +70°C	±50 ppm
operating temperature	-20° ~ +70°C
storage temperature	-55° ~ +125°C
symmetry	45%/55% ± 10% at ½ V <sub>DD</sub> level
rise & fall time max.	4 ns
"0" level max.	V <sub>DD</sub> x 0.1V
"1" level min.	V <sub>DD</sub> x 0.9 V
input voltage V <sub>DD</sub>	+3.3V ±5%
input current	6.0 mA typ., 11.0 mA max.
output load	15pF
start up time max.	10 ms
tristate function	yes
disable delay time max.	50 µs
enable delay time max.	4 ms
stand by current max.	10 µA
phase jitter	(12 kHz – 20 MHz) with 1 ps
random jitter max.	7ps
peak to peak jitter max.	40ps
contents of reel	1000 pcs.

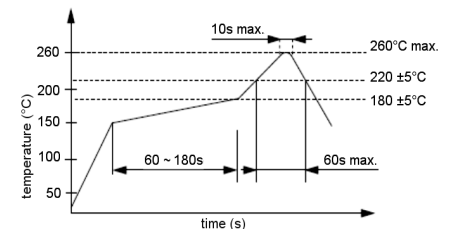
### Dimensions (mm):



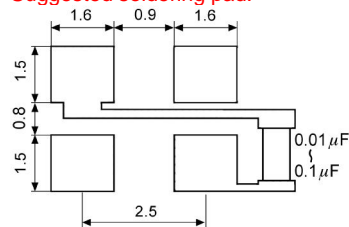
### Test circuit:



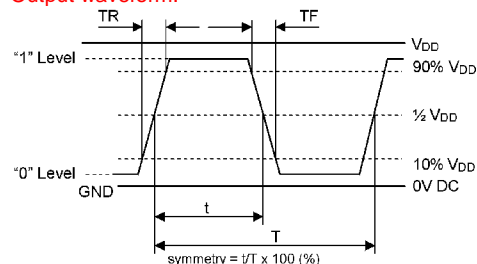
### Reflow soldering condition:



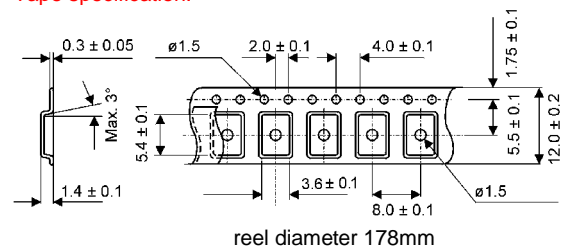
### Suggested soldering pad:



### Output waveform:



### Tape specification:



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