

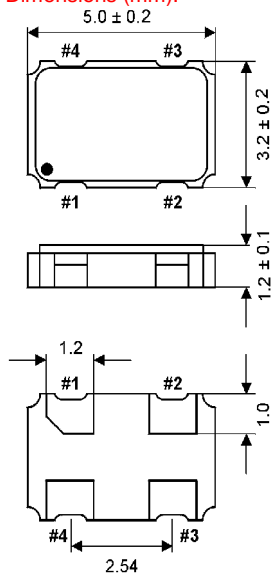
# Clock Oscillator

SMD-version

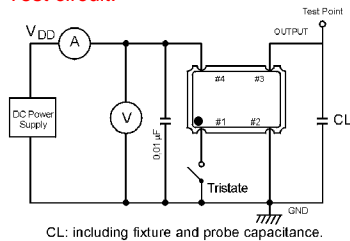
3,3V

|   |   |
|---|---|
| model   | KXO-V99-kHz   |
| frequency   | 32,7680 kHz   |
| frequency stability<br>at -20 ~ +70°C<br>at -40 ~ +85°C | ± 50 ppm<br>± 100 ppm                                     |
| operating temperature                                   | standard -20 ~ +70°C<br>available -40 ~ +85°C (=KXO-V95T) |
| storage temperature                                     | -55 ~ +125°C  |
| symmetry  | 45%/55% ± 10% at ½ V <sub>DD</sub> level                  |
| rise & fall time max.                                   | 160 ns Typ (1000 ns Max.)                                 |
| "0" level max.  | V <sub>DD</sub> x 0,4V                                    |
| "1" level min.  | V <sub>DD</sub> x 0,4 V                                   |
| input voltage V <sub>DD</sub>                           | + 3,3V ± 5%   |
| input current   | 1 mA max.   |
| output load   | 15pF  |
| start up time max.                                      | 3 ms max.   |
| tristate function                                       | yes   |
| disable delay time                                      | 2000 ns max.  |
| enable delay time                                       | 2000 ns max.  |
| stand by current  | 0.01 µA max.  |
| random jitter   | 7pS max.  |
| peak to peak jitter                                     | 40pS max.   |
| contents of reel  | 1000 pcs.   |
| part no.  | 12.xxxxx  |

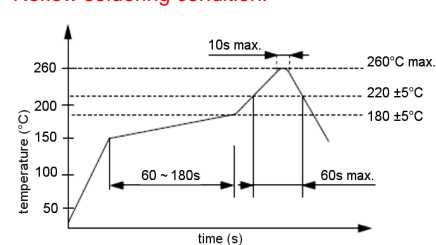
**Dimensions (mm):**



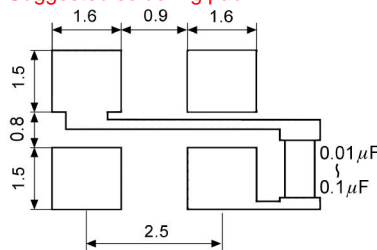
**Test circuit:**



**Reflow soldering condition:**

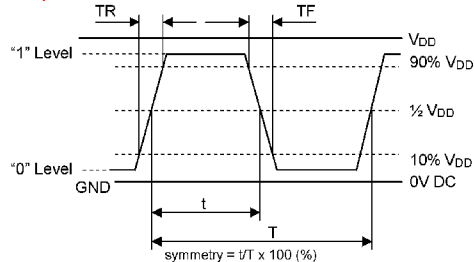


**Suggested soldering pad:**



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

**Output waveform:**



**Tape specification:**

