



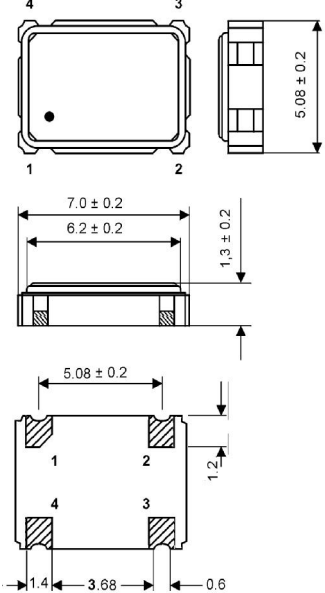
## Clock Oscillator

SMD-version

5V

|                                     |  |
|-------------------------------------|--|
| part no.                            | 12.94225   |
| model                               | KXO-97   |
| frequency                           | 40.0 MHz   |
| frequency stability at -20° ~ +70°C | ±50 ppm  |
| operating temperature               | -20° ~ +70°C   |
| storage temperature                 | -55° ~ +125°C  |
| symmetry                            | 50% ±10%<br>at 1.4V DC level<br>or ½ V <sub>DD</sub> level |
| rise & fall time max.               | TTL: 6 ns / CMOS: 10 ns                                    |
| "O" level max.                      | + 0.4V (TTL)<br>+ 0.5V (CMOS)                              |
| "1" level min.                      | +2.4 (TTL)<br>V <sub>DD</sub> -0.5V (CMOS)                 |
| input voltage V <sub>DD</sub>       | +5V DC ±10%  |
| Input current max.                  | 35 mA  |
| output load                         | 5 TTL gates 30 pF  |
| start up time max.                  | 10 ms  |
| tristate function                   | yes  |
| disable delay time max.             | 50 µs  |
| 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.  |

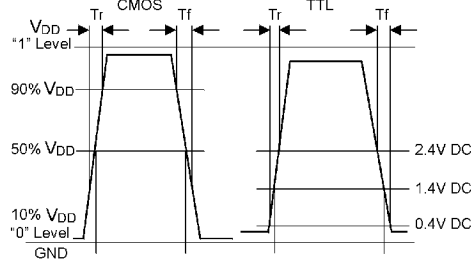
### Dimensions (mm):



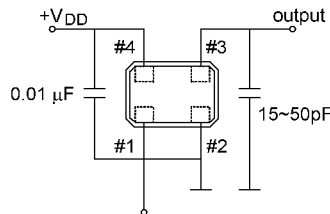
| PIN | Connection             |
|-----|------------------------|
| 1   | "L" (0V)   "H" or OPEN |
| 2   | GND                    |
| 3   | Z   OUTPUT             |
| 4   | V <sub>DD</sub>        |

Z: high impedance

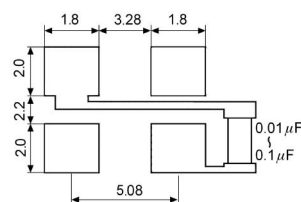
### Output waveform:



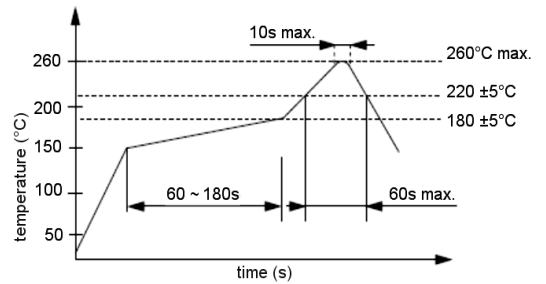
### Test circuit:



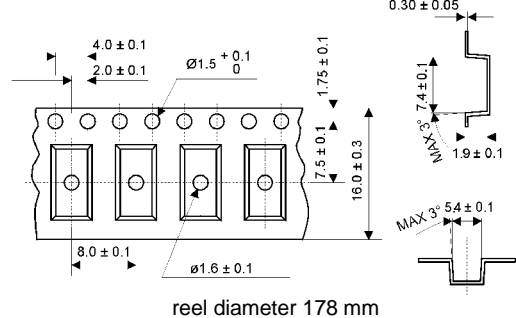
### Suggested soldering pad:



### Reflow soldering condition:



### Tape specifications:



reel diameter 178 mm