

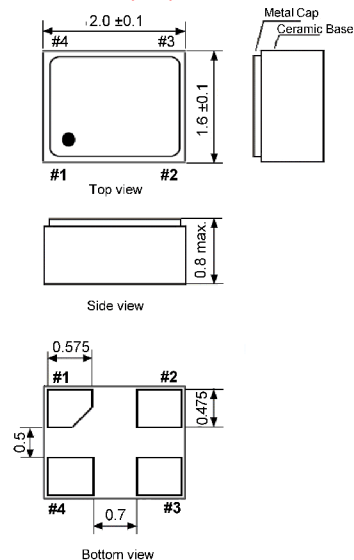


## Clock Oscillator SMD-version

+3.3 V

|                                     |                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------|
| part no.                            | 12.90306                                                                                     |
| model                               | KXO-V94                                                                                      |
| frequency                           | 14.0 MHz                                                                                     |
| frequency stability at -20° ~ +70°C | ±50 ppm                                                                                      |
| operating temperature               | -20° ~ +70°C                                                                                 |
| storage temperature                 | -55° ~ +100°C                                                                                |
| symmetry                            | 45 % ~ 55 % at 50 % V <sub>DD</sub> level                                                    |
| rise & fall time max.               | 5 ns (10 % V <sub>DD</sub> ~ 90 % V <sub>DD</sub> level)                                     |
| "0" level max.                      | V <sub>OL</sub> : 10 % V <sub>DD</sub>                                                       |
| "1" level min.                      | V <sub>OH</sub> : 90 % V <sub>DD</sub>                                                       |
| supply voltage V <sub>DD</sub>      | +3.3 V DC ±5 %                                                                               |
| tri-state control voltage (Pin#1)   | V <sub>IH</sub> : V <sub>DD</sub> x 0.7 min.<br>V <sub>IL</sub> : V <sub>DD</sub> x 0.3 max. |
| supply voltage range                | +1.8 V ~ +3.6 V                                                                              |
| supply current                      | 2.0 mA typ., 5.0 mA max.                                                                     |
| output load max.                    | 15 pF (HCMOS)                                                                                |
| start up time max.                  | 10 ms                                                                                        |
| disable delay time max.             | 200 ns                                                                                       |
| enable delay time max.              | 10 ms                                                                                        |
| stand by current max.               | 10 µA (Pin #1 = V <sub>IL</sub> )                                                            |
| contents of reel                    | 1000 pcs.                                                                                    |

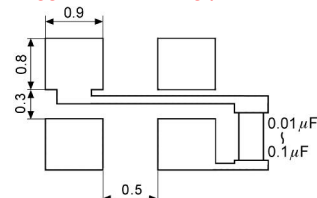
### Dimensions (mm):



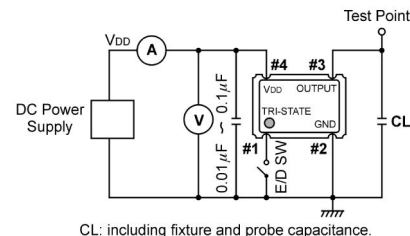
| PIN | Connection           |
|-----|----------------------|
| 1   | "L" (0V) "H" or OPEN |
| 2   | GND                  |
| 3   | Z OUTPUT             |
| 4   | V <sub>DD</sub>      |

Z: high impedance

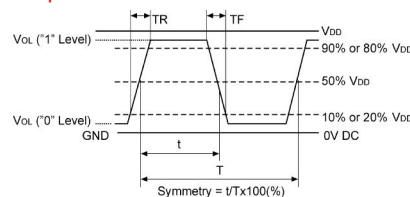
### Suggested soldering pad:



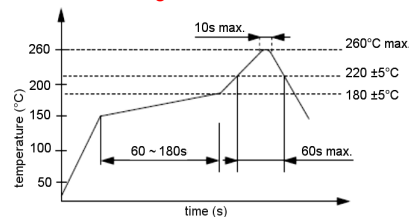
### Test circuit:



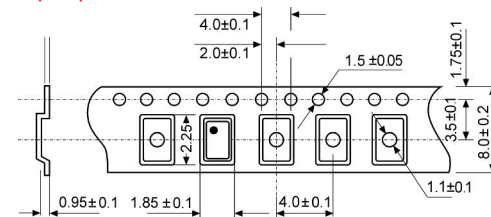
### Output Waveform:



### Reflow soldering condition:



### Tape specification:



reel diameter 178 mm