



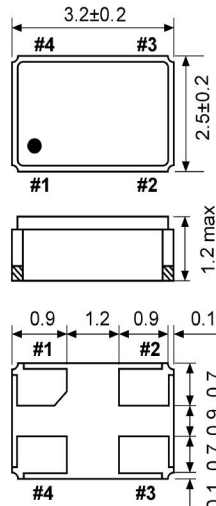
## Clock Oscillator SMD-version

+3,3V

|                                      |                                                                 |          |                        |
|--------------------------------------|-----------------------------------------------------------------|----------|------------------------|
| model                                | KXO-V96T                                                        |          |                        |
| frequency range                      | 32,7680 kHz                                                     |          |                        |
| frequency stability at -40° ~ + 85°C | ± 50 ppm                                                        |          |                        |
| operating temperature                | -40° ~ + 85°C                                                   |          |                        |
| storage temperature                  | -50° ~ +125°C                                                   |          |                        |
| symmetry                             | 40% ~ 60% at 50% V <sub>DD</sub> level                          |          |                        |
| rise & fall time max.                | 5 ns (10% V <sub>DD</sub> ~ 90% V <sub>DD</sub> level)          |          |                        |
| "O" level max.                       | VOL: 10% V <sub>DD</sub>                                        |          |                        |
| "1" level min.                       | VOH: 90% V <sub>DD</sub>                                        |          |                        |
| input voltage V <sub>DD</sub>        | +3,3V ±5%                                                       |          |                        |
| stand-by control voltage (pin#1)     | VIH(min): 70% V <sub>DD</sub><br>VIL(max): 30%V <sub>DD</sub> * |          |                        |
| supply voltage                       | -0,5V ~ +7,0V                                                   |          |                        |
| input current max.                   | 0,5 mA (pin #1=Open of VIH)                                     |          |                        |
| output load max.                     | 15pF (HCMOS)                                                    |          |                        |
| start up time max.                   | 10 ms                                                           |          |                        |
| disable delay time max.              | 150 ns                                                          |          |                        |
| enable delay time max.               | 10 ms                                                           |          |                        |
| stand by current max.*               | 50 µA (Pin #1=VIL)                                              |          |                        |
| jitter                               | deterministic jitter                                            | 5ps max. | norm 1-sigma 7ps max.  |
|                                      | random jitter                                                   | 7ps max. | peak to peak 40ps max. |
| contents of reel                     | 1000 pcs.                                                       |          |                        |
| part no.                             | 12.95134                                                        |          |                        |

\* Internal crystal oscillation to be halted (pin#1=VIL)

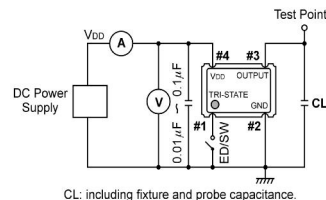
### Dimensions (mm):



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

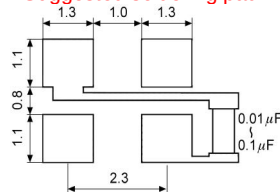
Z: high impedance

### Test circuit:

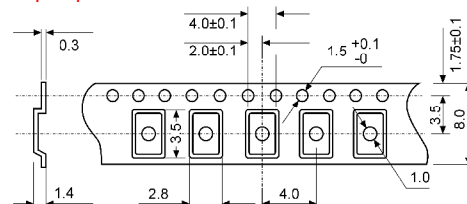


CL: including fixture and probe capacitance.

### Suggested soldering pad:

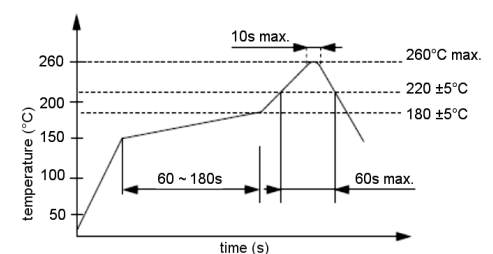


### Tape specification:



reel diameter 245 mm

### Reflow soldering condition:



### Output waveform:

