
RoHS 2015/863/EU ✓ REACH compliant ✓ Conflict minerals free ✓

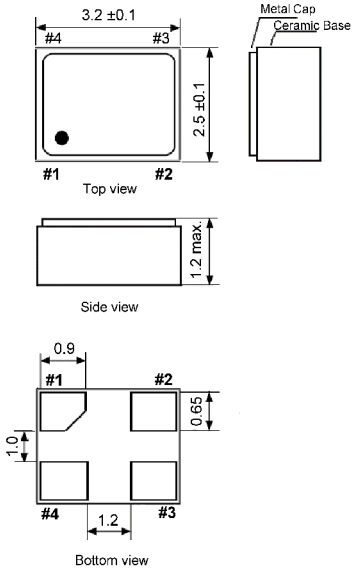
GEYER quartz technology

# Clock Oscillator SMD-version +3.3 V

| | |
|---|---|
| part no. | 12.95140 |
| model | KXO-V96T |
| frequency | 49.1520 MHz |
| frequency stability at -40° ~ +85°C | ±50 ppm |
| operating temperature | -40° ~ +85° |
| storage temperature | -50° ~ +125°C |
| symmetry | 40 % ~ 60 % at 50 % $V_{DD}$ level |
| rise & fall time max. | 5 ns (10 % $V_{DD}$ ~ 90 % $V_{DD}$ level) |
| "O" level max. | VOL: 10 % $V_{DD}$ |
| "1" level min. | VOH: 90 % $V_{DD}$ |
| input voltage $V_{DD}$ | +3.3 V ±5 % |
| stand-by control voltage (pin#1) | VIH (min): 70 % $V_{DD}$<br>VIL (max): 30 % $V_{DD}$* |
| supply voltage | -0.5 V ~ +7,0 V |
| input current max. | 6.0 mA typ., 11.0 mA max. |
| output load max. | 15 pF (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 max. | deterministic jitter 5 ps norm 1-sigma 7 ps<br>random jitter 7 ps peak to peak 40 ps |
| contents of reel | 1000 pcs. |

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

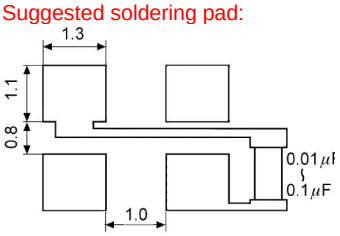
## Dimensions (mm):



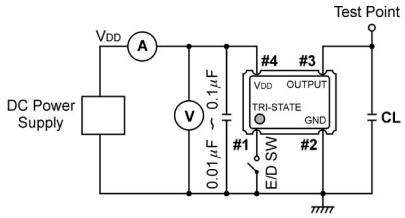

| PIN | Connection | |
|---|---|---|
| 1 | "L" (0V) | "H" or OPEN |
| 2 | GND | |
| 3 | Z | OUTPUT |
| 4 | $V_{DD}$ | |

Z: high impedance

## Suggested soldering pad:

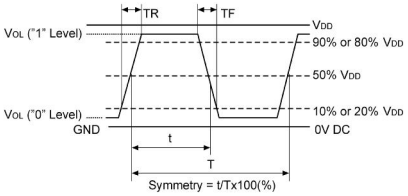



## Test circuit:

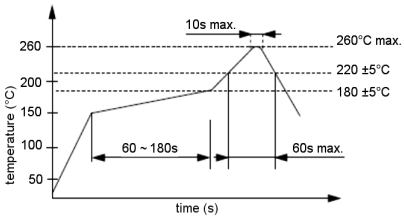



CL: including fixture and probe capacitance.

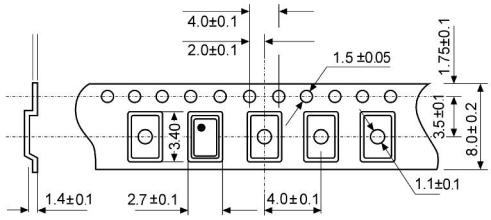
## Output Waveform:




## Reflow soldering condition:




## Tape specification:




reel diameter 178 mm

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