RoHS 2011/65/EU compliant | REACH compliant | Conflict minerals free

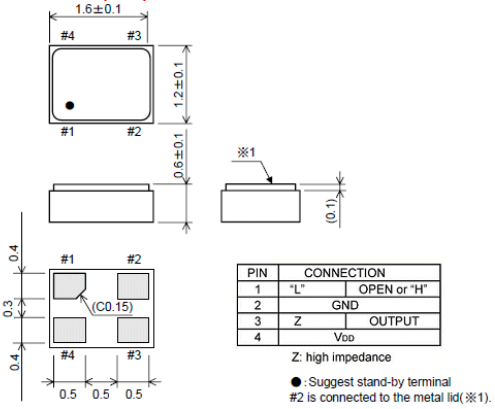
GEYER quartz technology

Clock Oscillator SMD-version

+1.8V / +2.5V / +3.3V

part no.	12.xxxxx
model	KXO-V93T
frequency range	1.0 ~ 80.0 MHz
frequency stability at -40° ~ +85°C at -20° ~ +70°C	 ±50 ppm ±30 ppm
operating temperature	standard -40° ~ +85°C available -20° ~ +70°C (KXO-V93)
storage temperature	-40° ~ +85°C
input voltage V_{DD}	+1.8V DC ±5%, +2.5V DC ±5% or +3.3V DC ±5%
input current max.	2 mA at 40 MHz V_{DD} +3V, no load
symmetry	50% ~ 50% at V_{DD} level
rise & fall time max.	4.5 ns (10% V_{DD} ~ 90% V_{DD} level)
"O" level max.	VOL: 10% V_{DD}
"1" level min.	VOH: 90% V_{DD}
supply voltage range	1.60V ~ 3.63V
tri-state control voltage (Pin#1)	VIH: V_{DD} x 0.7 min. VIL: V_{DD} x 0.3 max.
output load max.	15 pF HCMOS
start up time max.	5 ms at +1.8V 2 ms at +3.3V
disable delay time max.	200 ns
enable delay time max.	5 ms
stand by current max.	10 µA (Pin #1=VIL)
random jitter	2.9 ps typ. at V_{DD} +3.3V
total jitter	40 ps at V_{DD} +3.3V
contents of reel	5000 pcs.

Dimensions (mm):



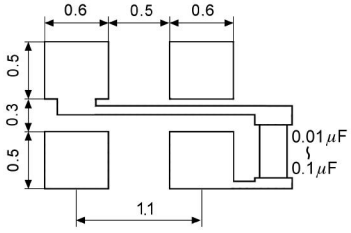
PIN	CONNECTION	
1	"L"	OPEN or "H"
2	GND	
3	Z	OUTPUT
4	VDD	

Z: high impedance

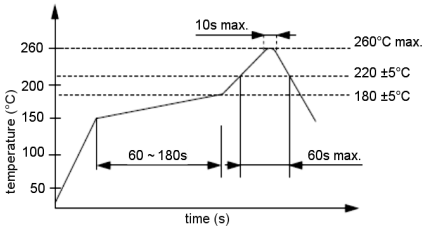
●:Suggest stand-by terminal

#2 is connected to the metal lid(※1).

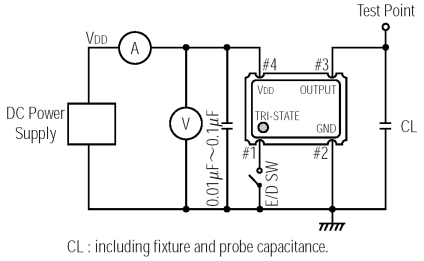
Suggested soldering pad:



Reflow soldering condition:

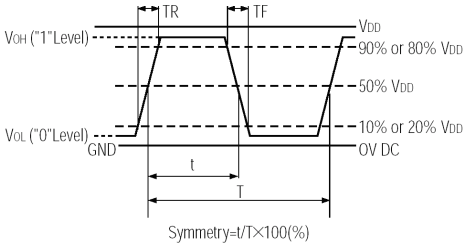


Test circuit:



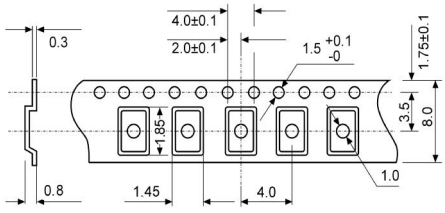
CL : including fixture and probe capacitance.

Output waveform:



Symmetry=t/T×100(%)

Tape specification:



reel diameter 180 mm

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