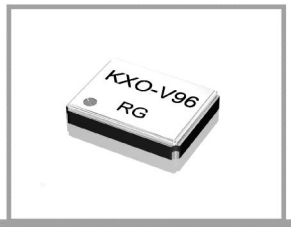


RoHS 2011/65/EU ✓ REACH compliant ✓ Conflict minerals free ✓

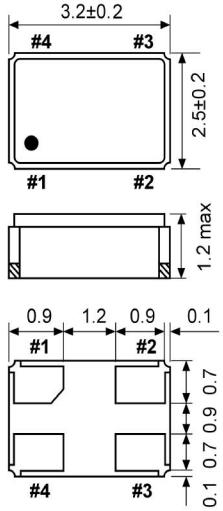
GEYER quartz technology

Clock Oscillator SMD-version +1,8 / +2,5 / +2,8 / +3,0 / +3,3V

model	KXO-V96			
frequency range	1,0 ~ 133,0 MHz			
frequency stability at -20° ~ + 70°C at -40° ~ + 85°C at -40° ~ +105°C	 ± 50 ppm ± 100 ppm ± 120 ppm			
operating temperature	standard -20° ~ + 70°C available -40° ~ + 85°C (=KXO-V96T) available -40° ~ +105°C (=KXO-V96E)			
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}	+1,8 ~ +3,3V ±5%			
stand-by control voltage (pin#1)	VIH(min): 70% V_{DD} VIL(max): 30%V_{DD}*			
supply voltage	-0,5V ~ +7,0V			
input current max.		+1,8V	+2,5V	+3,0V/+3,3V
	1,0 ~ 20,0MHz	3,5 mA typ., 6,0 mA max.	4,0 mA typ., 6,0 mA max.	4,0 mA typ., 6,0 mA max.
	20,1 ~ 50,0MHz	4,5 mA typ., 6,0 mA max.	4,0 mA typ.11,0 mA max.	6,0 mA typ 11,0 mA max.
	50,1 ~ 80,0MHz	6,0 mA typ.11,0 mA max.	6,0 mA typ.11,0 mA max.	9,0 mA typ.16,0 mA max.
	80,1 ~ 133,0MHz	15 mA typ., 20 mA max.	20 mA typ., 40 mA max.	20 mA typ., 40 mA max.
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.xxxxx			

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

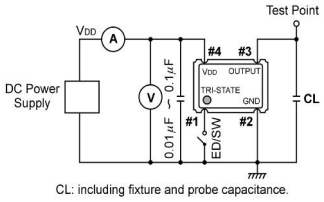
Dimensions (mm):



PIN	CONNECTION	
1	"L"	OPEN or "H"
2	GND	
3	Z	OUTPUT
4	V_{DD}	

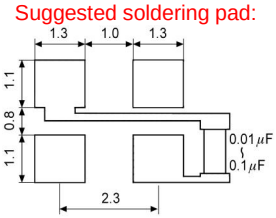
Z: high impedance

Test circuit:

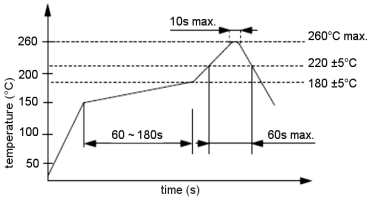


CL: including fixture and probe capacitance.

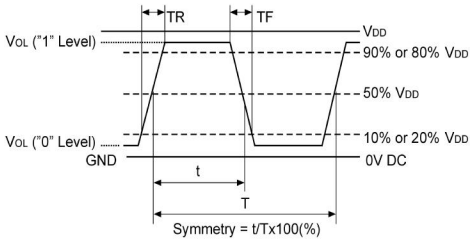
Suggested soldering pad:



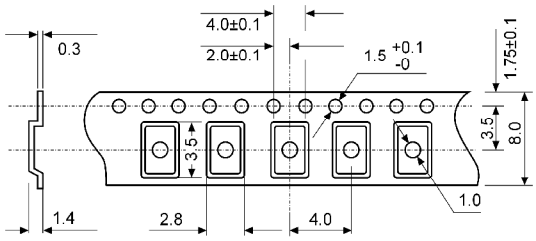
Reflow soldering condition:



Output waveform:



Tape specification:



reel diameter 245 mm

GEYER ELECTRONIC e.K. Lochhamer Schlag 5 82166 Gräfelfing/München
Tel. +49 89 546868-0 quartz@geyer-electronic.de www.geyer-electronic.de

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