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

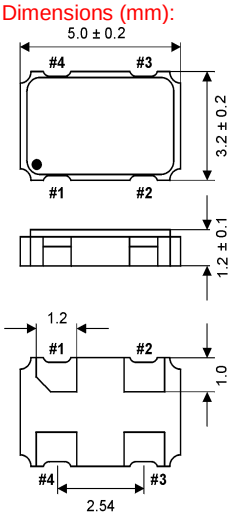
GEYER quartz technology

Clock Oscillator

SMD-version 1.8V / 2.5V / 3.0V / 3.3V

part no.	12.xxxxx			
model	KXO-V99			
frequency range	1.0 ~ 200.0 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-V99T) available -40° ~ +105°C (=KXO-V99E)			
storage temperature	-55° ~ +125°C			
supply voltage range	+1.8V ~ +3.3V			
input voltage V_{DD}	standard +3.3V DC ±5% available +1.8V DC ±5%, +2.5V DC ±5%, +3.0V DC ±5%			
input current		+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 ~ 125.0MHz	30 mA typ., 50 mA max.	30 mA typ., 50 mA max.	30 mA typ., 50 mA max.
	125.1 ~ 165.0MHz	50 mA typ., 65 mA max.	50 mA typ., 65 mA max.	50 mA typ., 65 mA max.
	165.1 ~ 200.0MHz	60 mA typ., 75 mA max	60 mA typ., 75 mA max	60 mA typ., 75 mA max
symmetry at 1.0 ~ 70.0 MHz at 70.1 ~200.0 MHz	 45%/55% ±10% at ½ V_{DD} level 40%/60% ±10% at ½ V_{DD} level			
rise & fall time max.	5 ns			
"O" level max.	V_{DD} x 0.1V			
"1" level min.	V_{DD} x 0.9 V			
output load	15 pF HCMOS			
start up time max.	10 ms			
tri-state function	yes			
disable delay time max.	50 µs			
enable delay time max.	4 ms			
stand by current max.	10 µA			
phase jitter	(12 kHz – 20 MHz) with 1 ps			
random jitter max.	7 ps			
peak to peak jitter max.	40 ps			
contents of reel	1000 pcs.			

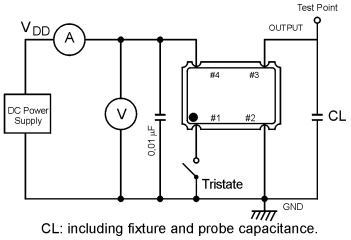
Dimensions (mm):



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

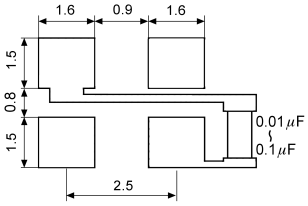
Z: high impedance

Test circuit:

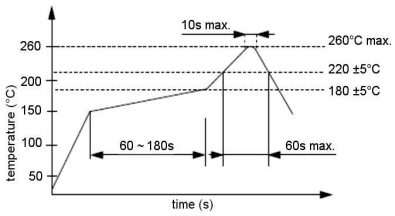


CL: including fixture and probe capacitance.

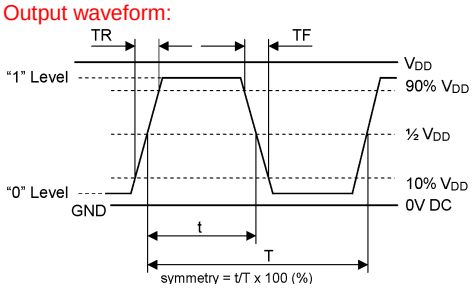
Suggested soldering pad:



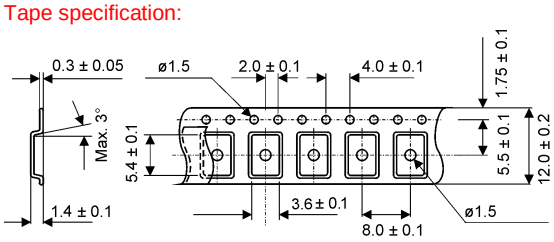
Reflow soldering condition:



Output waveform:



Tape specification:



reel diameter 178mm

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