

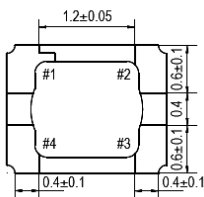
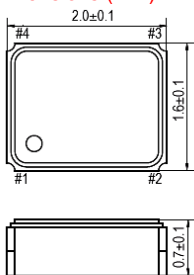
TCXO clipped sine wave

SMD-version +1.8 / +2.5 / +2.8 / +3.0 / +3.3V

Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-81	
frequency range	13.0 ~ 52.0 MHz	
initial frequency tolerance max.	±1.5 ppm	
frequency stability	vs. temp.range	±2.0 ppm over -40°C ~ +85°C (referred to +25°C)
	vs. input voltage max.	±0.1 ppm at V _{DD} ±5%
	vs. load max.	±0.1 ppm
	vs. aging max.	±1 ppm / year at +25°C
output	load	10k Ohm ±10% // 10pF ±10%
	voltage min.	0.8Vp-p at 10 k Ohm // 10 pF ±10%
	waveform	clipped sine wave
operating temperature range	standard -30°C ~ +85°C, avail. -40°C ~ +85°C	
storage temperature range	-40°C ~ +85°C	
supply voltage range	+1.6V ~ 3.6V	
max. ratings	-0.6V to V _{DD} +0.6V (+4.6V max.)	
input voltage V _{DD}	+1.8V DC ±5%, +2.5V DC ±5%, +2.8V DC ±5%, +3.0V DC ±5% or +3.3V DC ±5%	
input current max.	1.5 mA (no load)	
disable current max.	2 µA (pin #1 = V _{IL})	
start-up time max.	2 ms	
output disable voltage max.	V _{IL} : 20% V _{DD}	
output enable voltage min.	V _{IH} : 80% V _{DD}	
short-term frequency stability max.	±1 ppb (allan variance Tau = 0.1 sec.)	
harmonics max.	-5.0 dBc	
reflow frequency change	±1.0 ppm after reflow (at +25°C ±2°C)	
phase noise max.	-80 dBc/Hz at 10 Hz	
	-110 dBc/Hz at 100 Hz	
	-130 dBc/Hz at 1 kHz	
	-145 dBc/Hz at 10 kHz	
	-150 dBc/Hz at 100 kHz	
-150 dBc/Hz at 1 MHz		
contents of reel	2000 pcs.	

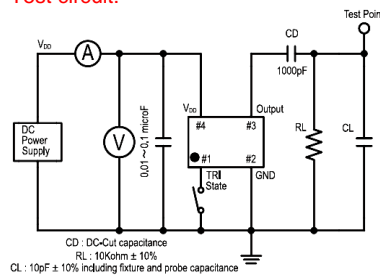
Dimensions (mm):



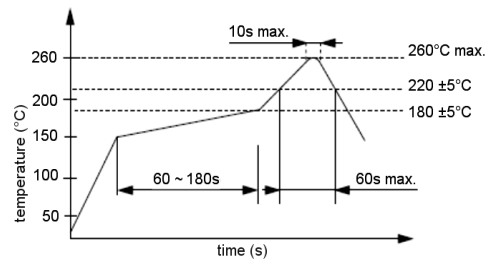
Pin	Connection
1	„L“ Open or „H“
2	GND
3	OUTPUT
4	V _{DD}

Z: high impedane

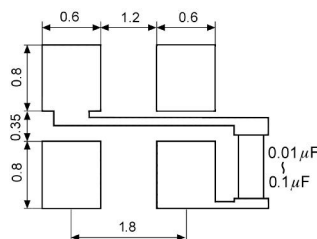
Test circuit:



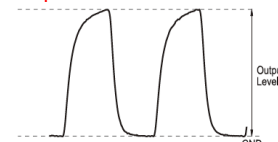
Reflow soldering condition:



Suggested soldering pad:



Output waveform:



Tape specification:

