



# VCTCXO clipped sine wave

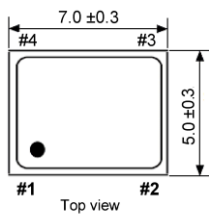
SMD-version

+3.0 / +3.3 V

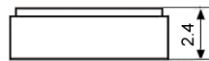
Voltage Controlled Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-82	
frequency range	9.6 ~ 52.0 MHz	
initial frequency tolerance max.	±1.5 ppm	
frequency stability	vs. temp.range	±2.0 ppm over -30°C ~ +80°C (referred to +25°C)
	vs. input voltage max.	±0.2 ppm at V <sub>DD</sub> ±5 %
	vs. load max.	±0.2 ppm
	vs. aging max.	±1 ppm / year at +25°C
output	load	10 kOhm ±10 % // 10 pF ±10 %
	voltage min.	0.8 Vp-p at 10 kOhm // 10 pF
	waveform	clipped sine wave
operating temperature range	-40°C ~ +85°C	
storage temperature	-55°C ~ +125°C	
supply voltage range	+1.6 V ~ +3.6 V	
input voltage V <sub>DD</sub>	+3.0 V DC ±5 % and +3.3 V DC ±5 %	
input current	1.2 mA typ., 2mA max. (no load)	
start-up time max.	3 ms	
harmonics max.	-5 dBc	
frequency control voltage (VC)	½ V <sub>DD</sub> ± 1V DC	
frequency adjustment (pullability) min.	±5 ppm (VC, positive slope)	
phase noise max.	-80 dBc / Hz at 10 Hz -110 dBc / Hz at 100 Hz -130 dBc / Hz at 1 kHz -140 dBc / Hz at 10 kHz -145 dBc / Hz at 100 kHz -150 dBc / Hz at 1 MHz	
contents of reel	2000 pcs.	

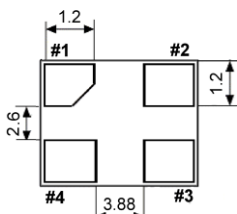
**Dimensions (mm):**



Top view



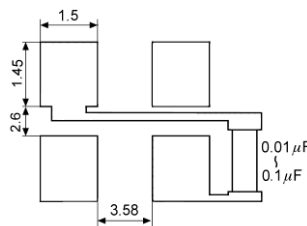
Side view



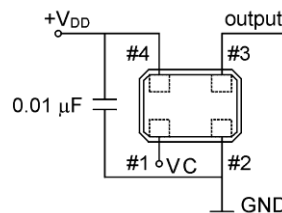
Bottom view

Pin	Connection
1	VC
2	GND
3	OUTPUT
4	V <sub>DD</sub>

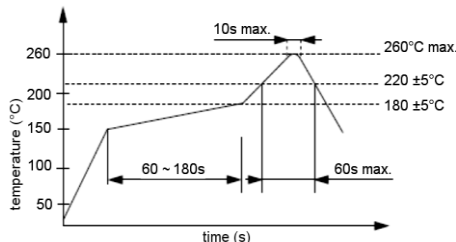
**Suggested soldering pad:**



**Test circuit:**



**Reflow soldering condition:**



**Tape specification:**

