



# VCTCXO clipped sine wave

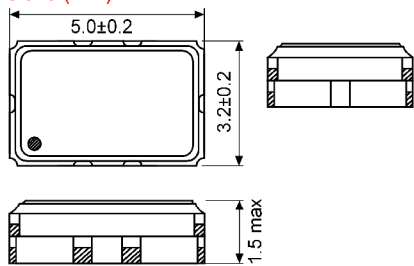
SMD-version

+3.0 / +3.3V

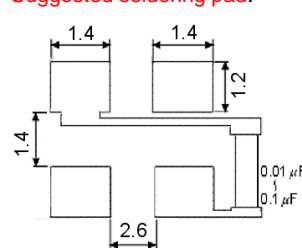
Voltage Controlled Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-83	
frequency range	12.0 ~ 26.0 MHz	
initial frequency tolerance max.	±1.5 ppm	
frequency stability	vs. temp.range	±1.5 ~ ±5.0 ppm over -10°C ~ +60°C ±2.0 ~ ±5.0 ppm over -20°C ~ +70°C ±2.0 ~ ±5.0 ppm over -40°C ~ +85°C
	vs. input voltage max.	±0.3 ppm at V <sub>DD</sub> ±5%
	vs. load max.	±0.3 ppm
	vs. aging max.	±1.0 ppm / year at +25°C
output	load	10k Ohm ±10% // 10pF ±10%
	voltage min.	0.8Vp-p at 10 k Ohm // 10 pF
	waveform	clipped sine wave
operating temperature range	-10°C ~ +60°C -20°C ~ +70°C -40°C ~ +85°C	
storage temperature	-40°C ~ +85°C	
supply voltage range	+1.6V ~ +3.6V	
input voltage V <sub>DD</sub>	+3.0V DC ± 5% or +3.3V DC ±5%	
input current	1.2 mA typ., 2mA max. (no load)	
start-up time max.	3 ms	
frequency control voltage (VC)	½ V <sub>DD</sub> ±1V DC	
frequency adjustment (pullability) min.	±5ppm (VC, positive slope)	
harmonics max.	-5.0 dBc	
phase noise typ.	-80 dBc/Hz max. at 10 Hz -110 dBc/Hz max. at 100 Hz -130 dBc/Hz max. at 1 kHz -145 dBc/Hz max. at 10 kHz -150 dBc/Hz max. at 100 kHz -150 dBc/Hz max. at 1 MHz	
contents of reel	1000 pcs.	

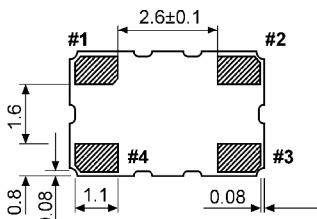
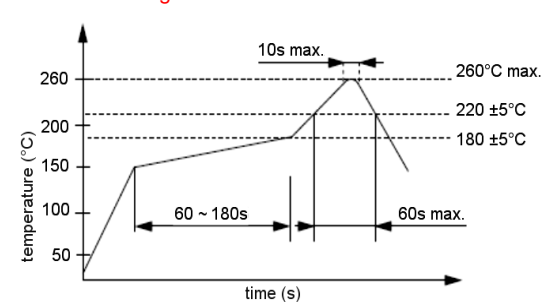
**Dimensions (mm):**



**Suggested soldering pad:**

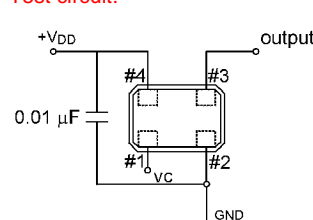


**Reflow soldering condition:**



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

**Test circuit:**



**Tape specification:**

