



# TCXO HCMOS

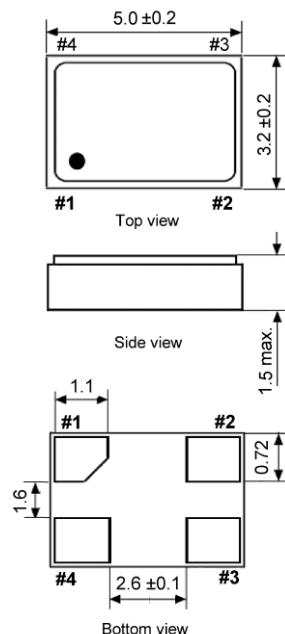
SMD-version

+2.5 / +3.3 V

Temperature Compensated Crystal Oscillator

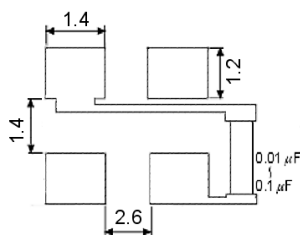
part no.	12.xxxxx	
model	KXO-83	
frequency range	6.0 ~ 40.0 MHz	
initial frequency tolerance max.	±1.5 ppm	
frequency stability	vs. temp.range	±0.5 ppm over -30°C ~ +85°C (referred to +25°C) ±1.0 ppm over -30°C ~ +85°C (referred to +25°C) ±1.5 ppm over -40°C ~ +85°C (referred to +25°C)
	vs. input voltage max.	±0.3 ppm at V <sub>DD</sub> ±5 %
	vs. load max.	±0.3 ppm ±5 %
	vs. aging max.	±1 ppm / year at +25°C
output	load	15 pF
	waveform	HCMOS
operating temperature range	-30°C ~ +85°C / -40°C ~ +85°C	
storage temperature range	-55°C ~ +125°C	
supply voltage range	+2.5 V ~ +3.4 V	
supply voltage V <sub>DD</sub>	+2.5 V DC ± 5% or +3.3 V DC ±5%	
supply current	2.0 mA max.	
start-up time max.	2 ms	
symmetry	40 % / 60 % at ½ V <sub>DD</sub> level	
rise and fall time max.	10 ns (10 % V <sub>DD</sub> ~ 90 % V <sub>DD</sub> level)	
"O" level max.; "1" level min.	V <sub>OL</sub> : 0.5 V; V <sub>OH</sub> : 80 % V <sub>DD</sub>	
phase noise typ.	-80 dBc / Hz at 10 Hz -110 dBc / Hz at 100 Hz -130 dBc / Hz at 1 kHz -140 dBc / Hz at 10 kHz -140 dBc / Hz at 100 kHz -145 dBc / Hz at 1 MHz	
contents of reel	1000 pcs.	

**Dimensions (mm):**

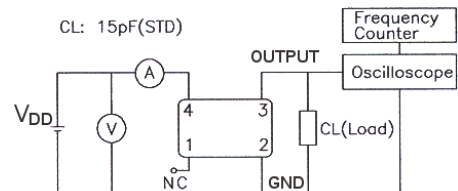


Pin	Connection
1	NC
2	GND
3	OUTPUT
4	V <sub>DD</sub>

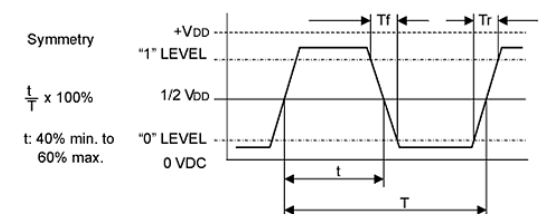
**Suggested soldering pad:**



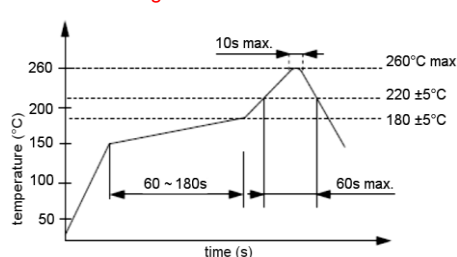
**Test circuit:**



**Output waveform:**



**Reflow soldering condition:**



**Tape specification:**

