



# TCXO HCMOS

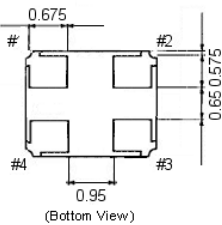
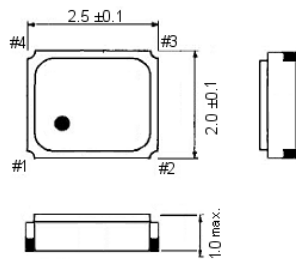
SMD-version +1.8 / +2.5 / +3.3 V

Temperature Compensated Crystal Oscillator

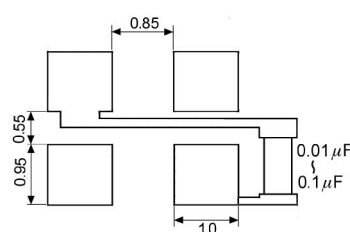
part no.	12.xxxxx	
model	KXO-86	
frequency range	13.0 ~ 54.0 MHz*	
initial frequency tolerance max.	±2.0 ppm	
frequency stability	vs. temp.range	±2.5 ppm over -40°C ~ +85°C (referred to +25°C) ±5 ppm over -40°C ~ +105°C (referred to +25°C)
	vs. input voltage	±0.3 ppm at V <sub>DD</sub> ±5 % DC
	vs. load max.	±0.2 ppm
	vs. aging max.	±1 ppm / year at +25°C
output	load	15 pF
	waveform	HCMOS
operating temperature range	-40°C ~ +85°C standard -40°C ~ +105°C upon request	
storage temperature range	-40°C ~ +85°C	
supply voltage V <sub>DD</sub>	+1.8 V DC ±5 %, +2.5 V DC ±5 % or +3.3 V DC ±5 %	
supply current max.	10.0 mA (no load)	
start-up time max.	10 ms	
symmetry	45 % / 55 % at ½ V <sub>DD</sub> level	
rise and fall time max.	5 ns (10 % V <sub>DD</sub> ~ 90 % V <sub>DD</sub> level)	
"0" level max.	V <sub>OL</sub> : 10 % V <sub>DD</sub>	
"1" level min.	V <sub>OH</sub> : 90 % V <sub>DD</sub>	
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	1000 pcs.	

\* Standard frequencies: 13.0 MHz 13.50 MHz 16.0 MHz 20.0 MHz 26.0 MHz 27.0 MHz 32.0 MHz 40.0 MHz 54.0 MHz

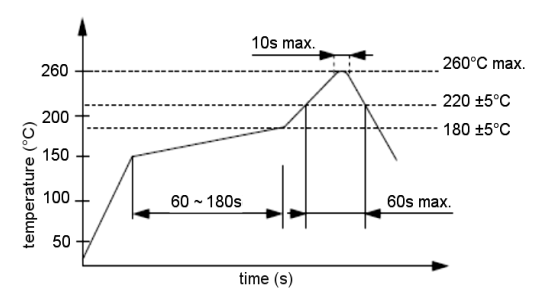
### Dimensions (mm):



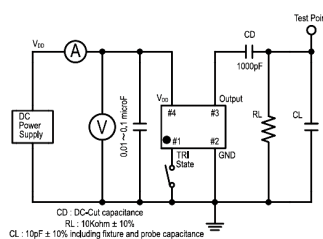
### Suggested soldering pad:



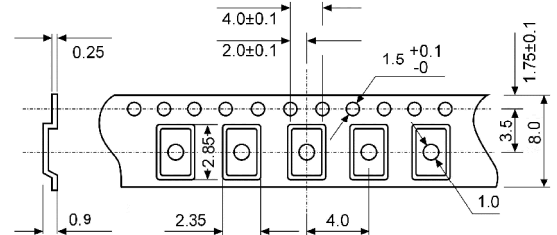
### Reflow soldering condition:



### Test circuit:



### Tape specification:



reel diameter 180 mm

Pin	Connection
1	„L“ Open or „H“
2	GND
3	Z OUTPUT
4	V <sub>DD</sub>

Z: High Impedance