



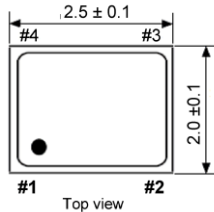
TCXO HCMOS

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

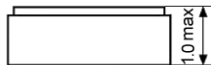
Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-86	
frequency range	8.0 ~ 70.0 MHz	
initial frequency tolerance max.	±2 ppm (after 2 reflows)	
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) ±2.5 ppm over -40°C ~ +85°C (referred to +25°C)
	vs. input voltage	±0.2 ppm at V _{DD} ±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	-30°C ~ +85°C / -40°C ~ +85°C	
storage temperature range	-55°C ~ +125°C	
supply voltage V _{DD}	+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 _{DD} level	
rise and fall time max.	5 ns (10 % V _{DD} ~ 90 % V _{DD} level)	
"O" level max.; "1" level min.	V _{OL} : 10 % V _{DD} ; V _{OH} : 90 % V _{DD}	
phase noise max.	-75 dBc / Hz at 10 Hz -105 dBc / Hz at 100 Hz -125 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.	

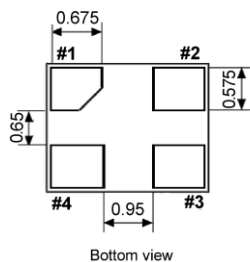
Dimensions (mm):



Top view



Side view

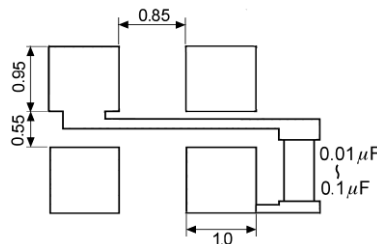


Bottom view

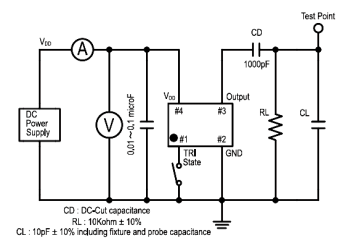
Pin	Connection
1	„L“ Open or „H“
2	GND
3	Z OUTPUT
4	V _{DD}

Z: High Impedance

Suggested soldering pad:

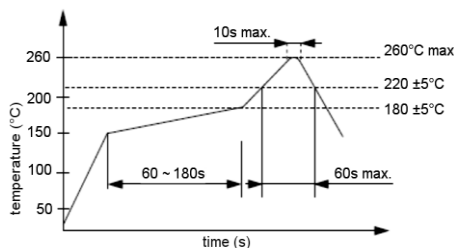


Test circuit:

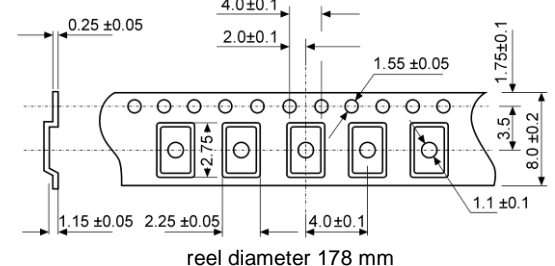


CD: DC-Cut capacitance
RL: 10kOhm ± 10%
CL: 10pF ± 10% including fixture and probe capacitance

Reflow soldering condition:



Tape Specification:



reel diameter 178 mm