



VCTCXO clipped sine wave

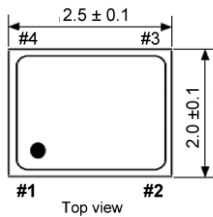
SMD-version

+1.8 / +2.5 / +3.3 V

Voltage Controlled Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-86	
frequency range	13.0 ~ 56.0 MHz	
initial frequency tolerance max.	±2.0 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 %
	vs. load max.	±0.2 ppm
	vs. aging max.	±1.0 ppm / year at +25°C
output	load	10k Ohm ±10 % // 10 pF ±10 %
	voltage min.	0.8 Vp-p at 10 kOhm // 10 pF
	waveform	clipped sine wave
operating temperature range	-30°C ~ +85°C / -40°C ~ +85°C	
storage temperature	-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.	2.0 mA (13 MHz ≤ Fo ≤ 26 MHz) 2.5 mA (26 MHz < Fo ≤ 56 MHz)	
start-up time max.	4 ms	
frequency control voltage (VC)	½ V _{DD} ±1 V DC	
frequency adjustment (pullability)	±9 ppm ~ ±15 ppm	
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.	

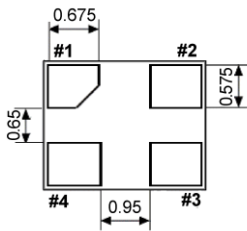
Dimensions (mm):



Top view

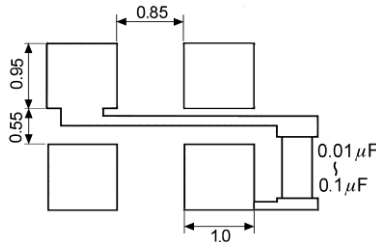


Side view

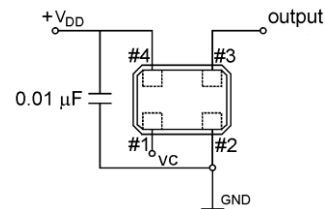


Bottom view

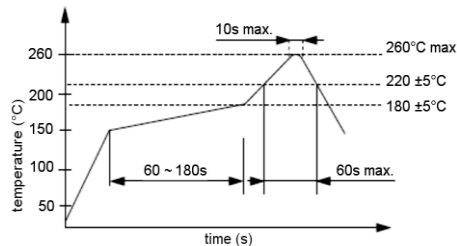
Suggested soldering pad:



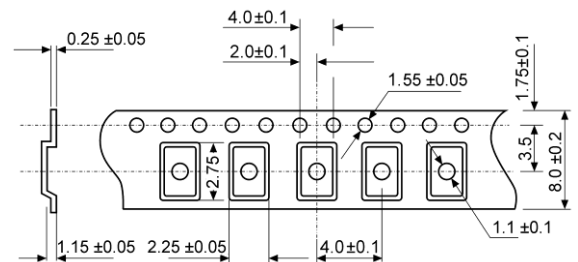
Test circuit:



Reflow soldering condition:



Tape specification:



reel diameter 178 mm

PIN	Connection
1	VC
2	GND
3	OUTPUT
4	V _{DD}