

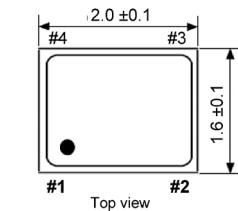
VCTCXO clipped sine wave

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

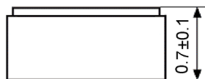
Voltage Controlled Temperature Compensated Crystal Oscillator

part no.	12.xxxxx	
model	KXO-81	
frequency range	13.0 ~ 52.0 MHz	
frequency tolerance max. (after 2 reflows)	±2 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) ±2.0 ppm over -40°C ~ +85°C (referred to +25°C)
	vs. input voltage max.	±0.2 ppm at V _{DD} ±5 %
	vs. load max.	±0.2 ppm
	vs. aging max.	±1 ppm / year at +25°C
output	load	10 kOhm ±10 % // 10 pF ±10 %
	voltage min.	0.8 Vp-p at 10 kOhm // 10 pF
	waveform	clipped sine wave
operating temperature range	standard -30°C ~ +85°C; available -40°C ~ +85°C	
storage temperature	-40°C ~ +85°C	
supply voltage V _{DD}	+1.8 V DC ±5 %, +2.5 V DC ±5 % or +3.3 V DC ±5 %	
supply current max.	13.0 ~ 26 MHz 2.0 mA (no load) > 26 MHz 2.5 mA (no load)	
start-up time max.	2 ms	
harmonics max.	-7.0 dBc	
frequency control voltage (VC)	+1.8 V = ½ V _{DD} ±0.9 V DC; +2.5 V / +3.3 V = ½ V _{DD} ±1 V DC	
frequency adjustment (pullability)	±9 ppm ~ ±15 ppm	
phase noise	-75 dBc/Hz max. at 10 Hz -105 dBc/Hz max. at 100 Hz -125 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	3000 pcs.	

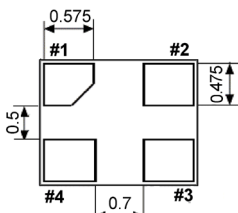
Dimensions (mm):



Top view

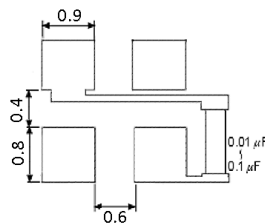


Side view

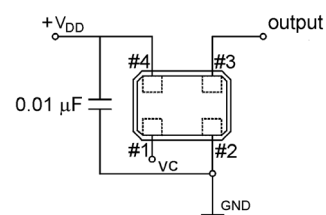


Bottom view

Suggested soldering pad:

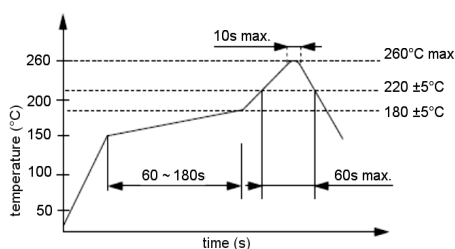


Test circuit:

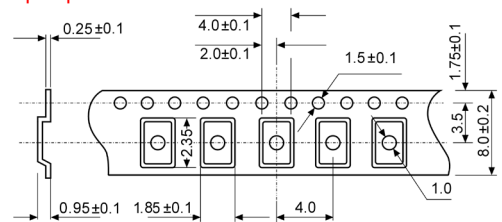


PIN	Connection
1	VC
2	GND
3	OUTPUT
4	V _{DD}

Reflow soldering condition:



Tape specification:



reel diameter 178 mm