

# PECL Positive Emitter Coupled Oscillator

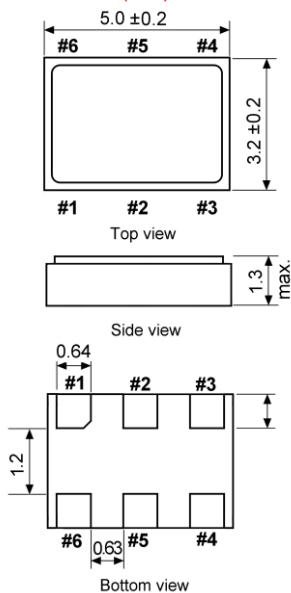
SMD-version

+2.5 / +3.3 V

part no.	12.xxxxx
model	KXO-68
frequency range	13.5 ~ 312.50 MHz
frequency stability incl. temperature stability, input voltage and load stability, aging	±100ppm = KXO-68 ±50ppm = KXO-68 ±25ppm = KXO-68
output load	50 Ohm (V <sub>DD</sub> to +2.0 V)
operating temperature range	standard -20°C ~ +70°C; available -40°C ~ +85°C
storage temperature	-55°C ~ +125°C
supply voltage	+2.5 V DC ±5 % or +3.3 V DC ±5 %
supply current (Pin#1=Open or VIH) max.	70 mA
start up time (max.)	10 ms
symmetry	45 % / 55 % at ½ V <sub>DD</sub> level
rise time (Tr)/ fall time (Tf) max.	600ps (Output level 20 % ~ 80 % of waveform)
disable delay/enable delay time max.	100 ns/10ms
"O" level max./ "1" level min.	V <sub>DD</sub> to -1.625 V DC/ V <sub>DD</sub> to -1.025 V DC
stand-by control voltage	V <sub>IH</sub> : +0.7 V <sub>DD</sub> min./ V <sub>IL</sub> : +0.3 V <sub>DD</sub> max.*
stand-by current (Pin#1=VIL) max.	100 µA
tristate function	yes
phase jitter (12 kHz to 20 MHz band) max.	1 ps RMS
typical phase noise	-70 dBc/Hz at 10 Hz -105 dBc/Hz at 100 Hz -130 dBc/Hz at 1 kHz -145 dBc/Hz at 10 kHz -145 dBc/Hz at 100 kHz -145 dBc/Hz at 1 MHz
contents of reel	1000 pcs.

\* Internal crystal oscillation to be halted (Pin#1=VIL).

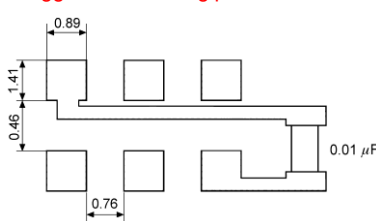
### Dimensions (mm):



Pin	Connection
1	Tri-state*
2	NC
3	GND
4	Output
5	C-Output
6	V <sub>DD</sub>

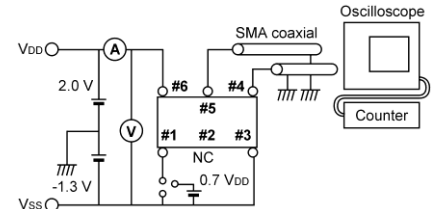
\*enable high

### Suggested soldering pad:

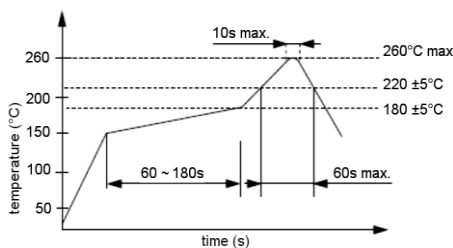


Note:  
A capacitor of value 0,01µF and 10µF between V<sub>DD</sub> and GND is recommended.

### Test circuit:



### Reflow soldering condition:



### Tape specification:

