



GEYER KXO-88 Features and Applications:

- Low Power Temperature Compensated Crystal Oscillator (TCXO)
- Clipped Sine Wave Output
- Low Phase Noise
- Supply voltage range +1.8 V ~ +3.6 V
- Package size: 1.6 x 1.2 x 0.8 mm, 4 pad footprint
- Frequency range: 13.0 ~ 52.0 MHz
- Moisture Sensitivity Level, MSL Level 1
- Recommended for GPS & Navigation, Mobile Communication, IoT, Sensors, Health Monitoring, Wearables, Consumer, etc.
- For further requirements, please contact us

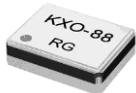


TCXO clipped sine wave

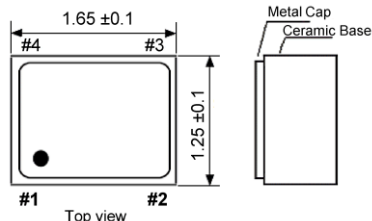
SMD-version +1.8 / +2.5 / +3.3 V

Temperature Compensated Crystal Oscillator

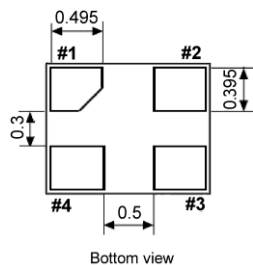
part no.	12.xxxxx
model	KXO-88
frequency range	13.0 ~ 52.0 MHz
frequency tolerance max.	±2.0 ppm at 25°C (after 2 reflows)
frequency stability	vs. temp. range max. ±0.5 ppm over -30°C ~ +85°C (referred to +25°C) ±1.0 ppm over -30°C ~ +85°C (referred to +25°C) ±2.5 ppm over -40°C ~ +85°C (referred to +25°C)
	vs. input voltage 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 V _{p-p} at 10 kOhm // 10 pF ±10 %
	waveform clipped sine wave
operating temperature range	-30°C ~ +85°C / -40°C ~ +85°C
storage temperature range	-55°C ~ +125°C
supply voltage range	+1.8 V DC ±5 %, +2.5 V DC ±5 % or +3.3 V DC ±5 %
supply current max.	2.0 mA (13 MHz ≤ F _o ≤ 26 MHz) 2.5 mA (26 MHz < F _o ≤ 56 MHz)
start-up time max.	3 ms (V _{out} ≥ 90 % V _{p-p}) 4 ms (within ±2.5 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	3000 pcs.



Dimensions (mm):



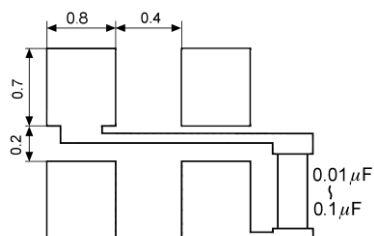
Side view



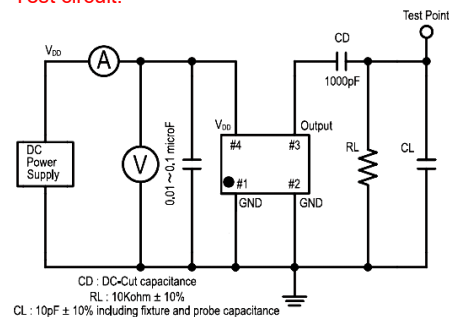
Bottom view

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

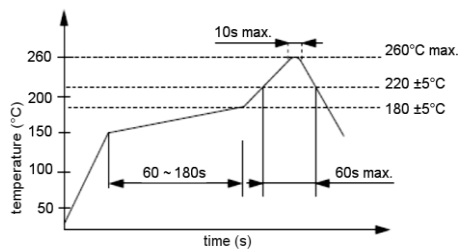
Suggested soldering pad:



Test circuit:



Reflow soldering condition:



Tape specification:

