

GEYER KXO-52 Features and Applications:

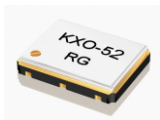
- Ultra Low Jitter HCSL Differential Oscillator
- Package size: 2.5 x 2.0 x 1.0 mm, 6 pad footprint
- Frequency range: 100.0 ~ 175.0 MHz
- Ultra low phase noise
- Moisture Sensitivity Level, MSL Level 1
- Recommended for GPS (PCIe), Entertainment systems (PCIe), etc
- For further requirements, please contact us



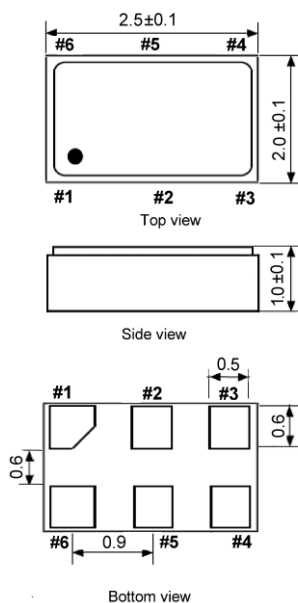
HCSL Clock Oscillator SMD-version

+1.8 / +2.5 / +3.3 V

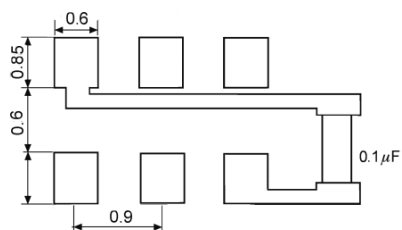
part no.	12.xxxxx
model	KXO-52
frequency range	100.0 ~ 175.0 MHz
frequency stability incl. temperature stability, input voltage and load stability, aging.	±20, ±25, ±50, ±100 ppm over -20°C ~ +70°C / -40°C ~ +85°C (referred to +25°C)
output load	50 Ohm to ground on each output
operating temperature	-20° ~ +70°C, -40° ~ +85°C (=KXO-52T)
storage temperature	-55° ~ +150°C
supply voltage	+1.8 V DC ±10 %, +2.5 V DC ±10 % or +3.3 V DC ±10 %
output voltage level	V _{OL} : 0.15 V min. / V _{OH} : 1.0 V max.
output swing (single-ended)	450 mV (min)
supply current typ./max.	38 mA / 48 mA
start-up time typ./max.	1 ms / 5 ms
symmetry	50 % ±5 %
rise time (Tr) / fall time (Tf) typ./max.	0.2 ns / 0.6 ns (Output level 20 % ~ 80 % of waveform)
aging ((referred to +25°C) max	±3 ppm first year, ±2 ppm following years
disable delay/enable delay time max.	200 ns / 10 ms
enable/disable (Pin 1) input voltage	30 % V _{DD} max.: output disable / 70 % V _{DD} min.: output enable
tristate function	yes
RMS jitter (12 kHz ~ 20 MHz) typ./max.	50 fs / 300 fs
phase noise typ. (125MHz)	-114 dBc / Hz at 100 Hz -135 dBc / Hz at 1 kHz -147 dBc / Hz at 10 kHz -157 dBc / Hz at 100 kHz -163 dBc / Hz at 1 MHz -164 dBc / Hz at 10 MHz
contents of reel	3000 pcs.



Dimensions (mm):



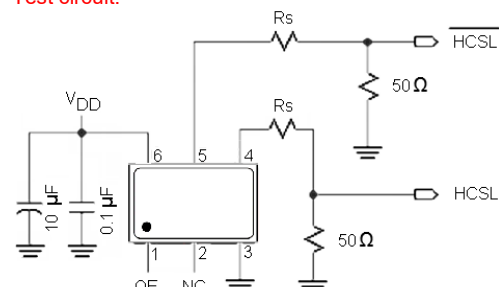
Suggested soldering pad:



Note:
Capacitors of value 0,1 µF and 10 µF between V_{DD} and GND are recommended.

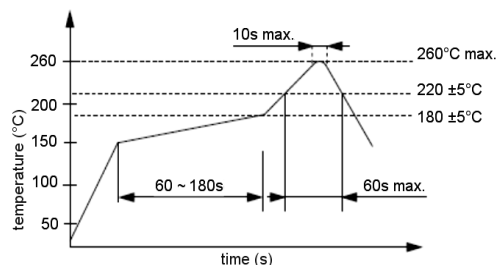
PIN	Connection
1	Tri-state
2	NC
3	GND
4	Output
5	C-Output
6	V_{DD}

Test circuit:



$R_s = 0$ to 33 Ω to minimize ringing in application

Reflow soldering condition:



Tape specification:

