RoHS 2015/863/EU | REACH compliant | Conflict minerals free

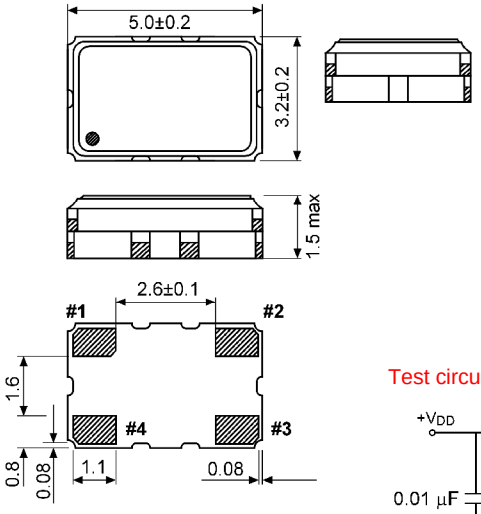
GEYER quartz technology

VCTCXO clipped sine wave SMD-version +3.0V

Voltage Controlled Temperature Compensated Crystal Oscillator

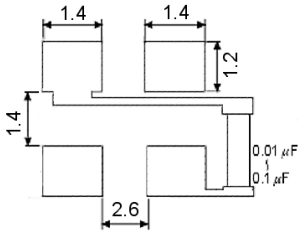
part no.		12.97204
model		KXO-83
frequency		24.55350 MHz
initial frequency tolerance max.		±1.5 ppm
frequency stability	vs. temp.range	±1.5 over -30°C ~ +85°C (referred to +25°C)
	vs. input voltage max.	±0.3 ppm at V_{DD} ±5%
	vs. load max.	±0.3 ppm
	vs. aging max.	±1 ppm / year at +25°C
output	load	10k Ohm ±10% // 10pF ±10%
	voltage min.	0.8Vp-p at 10 k Ohm // 10 pF
	waveform	clipped sine wave
operating temperature range		-30°C ~ +85°C
storage temperature		-40°C ~ +85°C
supply voltage range		+1.6V ~ +3.6V
input voltage V_{DD}		+3.0V DC ±5%
input current		1.2 mA typ., 2 mA max. (no load)
start-up time max.		3 ms
frequency control voltage (VC)		½ V_{DD} ±1V DC
frequency adjustment (pullability) min.		±5ppm (VC, positive slope)
harmonics max.		-5.0 dBc
phase noise typ.		-80 dBc/Hz max. at 10 Hz -110 dBc/Hz max. at 100 Hz -130 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		1000 pcs.

Dimensions (mm):

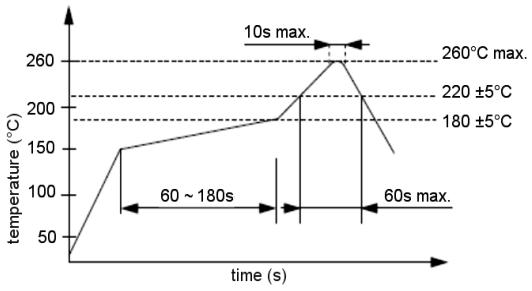


Pin	Connection
1	VC
2	GND
3	OUTPUT
4	V_{DD}

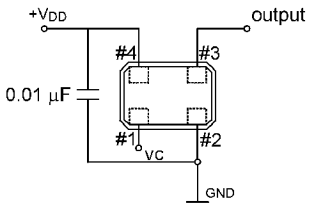
Suggested soldering pad:



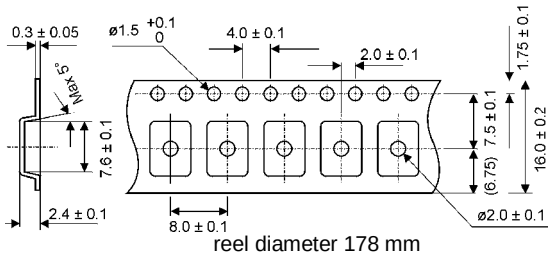
Reflow soldering condition:



Test circuit:



Tape specification:



reel diameter 178 mm

GEYER ELECTRONIC e.K. Lochhamer Schlag 5 82166 Gräfelfing/München
Tel. +49 89 546868-0 quartz@geyer-electronic.de www.geyer-electronic.de