

## VCTCXO clipped sine wave

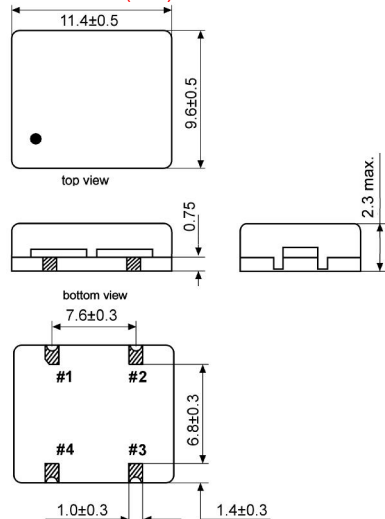
SMD-version

+3.3V

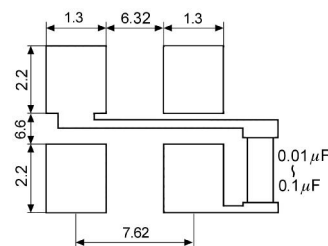
Voltage Controlled Temperature Compensated Crystal Oscillator

|                                    |   |   |
|------------------------------------|---|---|
| part no.                           | 12.xxxxx  |   |
| model                              | KXO-85  |   |
| frequency range                    | 12.0 ~ 27.0 MHz   |   |
| frequency stability                | vs. temp.range  | ±1.5 ppm over -30°C ~ +70°C (referred to +25°C) |
|                                    | vs. input voltage max.  | ±0.3 ppm at V <sub>DD</sub> ±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 ~ +75°C   |   |
| storage temperature                | -40°C ~ +85°C   |   |
| input voltage V <sub>DD</sub>      | +3.3V DC ±5%  |   |
| input current max.                 | 2 mA (no load)  |   |
| start-up time max.                 | 5 ms  |   |
| harmonics max.                     | -5 dBc  |   |
| frequency control voltage (VC)     | ½ V <sub>DD</sub> ±1V DC  |   |
| frequency adjustment (pullability) | ±30ppm  |   |
| phase noise                        | -80 dBc/Hz max. at 10 Hz<br>-110 dBc/Hz max. at 100 Hz<br>-130 dBc/Hz max. at 1 kHz<br>-145 dBc/Hz max. at 10 kHz<br>-150 dBc/Hz max. at 100 kHz<br>-150 dBc/Hz max. at 1 MHz |   |
| contents of reel                   | 2000 pcs.   |   |

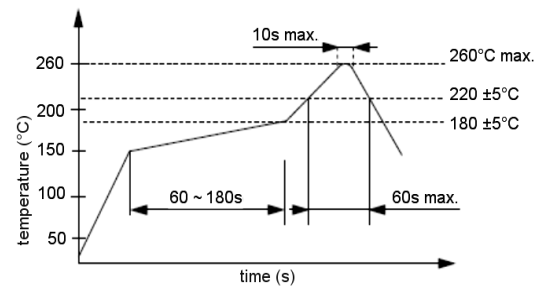
### Dimensions (mm):



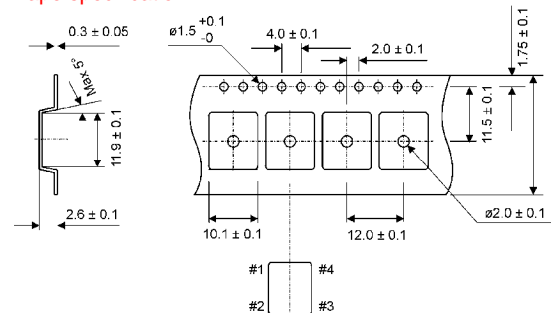
### Suggested soldering pad:



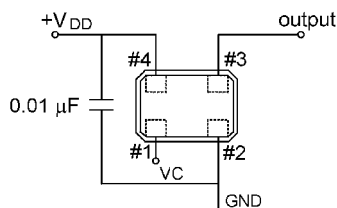
### Reflow soldering condition:



### Tape specification:



### Test circuit:



| Pin | Connection      |
|-----|-----------------|
| 1   | VC              |
| 2   | GND             |
| 3   | OUTPUT          |
| 4   | V <sub>DD</sub> |