



## VCXO HCMOS

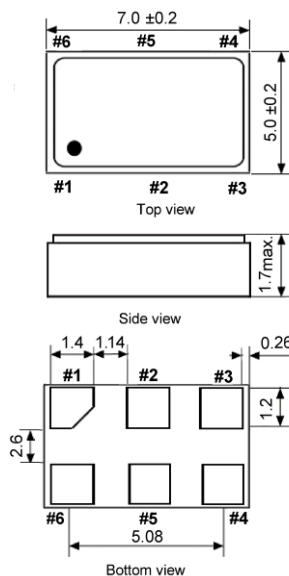
SMD-version

+1.8 / +2.5 / +3.3 / +5 V

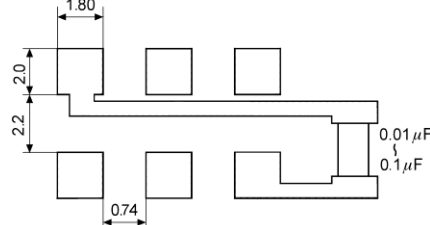
Voltage Controlled Crystal Oscillator

|   |   |                          |                        |
|---|---|--------------------------|------------------------|
| part no.                                | 12.xxxxx  |                          |                        |
| model                                   | KXO-75  |                          |                        |
| frequency range                         | 4.0 ~ 54.0 MHz  | 1.0 ~ 170.0 MHz          | 1.0 ~ 100.0 MHz        |
| supply voltage V <sub>DD</sub>          | +1.8 V DC, +2.5 V DC ±5 %   | +3.3 V DC ±5 %           | +5.0 V DC ±5 %         |
| frequency control voltage (PIN1)        | 1.25 V ±1.05 V at +2.5 V  | 1.65 V ±1.35 V at +3.3 V | 2.5 V ±2.0 V at +5.0 V |
| frequency stability                     | over all parameters ±25, ±50, ±100 ppm over -20°C ~ +70°C / -40°C ~ +85°C (referred to +25°C)                           |                          |                        |
| output                                  | load  | 15 pF                    |                        |
|   | waveform  | HCMOS                    |                        |
| operating temperature range             | -20°C ~ +70°C<br>-40°C ~ +85°C  |                          |                        |
| storage temperature range               | -55°C ~ +125°C  |                          |                        |
| supply voltage range                    | +1.8 ~ +5.4 V   |                          |                        |
| supply current max.                     | 10 mA at 1.0 MHz ~ 35 mA at 170.0 MHz (no load)   |                          |                        |
| start-up time max.                      | 5 ms  |                          |                        |
| symmetry                                | 40 % / 60 % at ½ V <sub>DD</sub> level  |                          |                        |
| rise and fall time max.                 | 10 ns   |                          |                        |
| frequency adjustment (pullability) min. | ±50 ppm ~ ±100 ppm  |                          |                        |
| phase jitter max.                       | 1.0 ps RMS  |                          |                        |
| phase noise max.                        | -80 dBc/Hz at 10 Hz<br>-110 dBc/Hz at 100 Hz<br>-135 dBc/Hz at 1 kHz<br>-140 dBc/Hz at 10 kHz<br>-145 dBc/Hz at 100 kHz |                          |                        |
| contents of reel                        | 1000 pcs.   |                          |                        |

### Dimensions (mm):



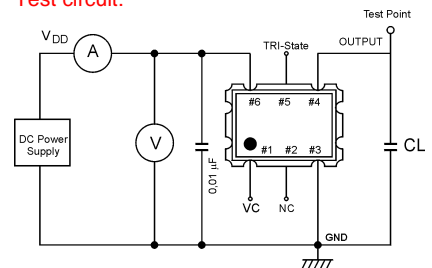
### Suggested soldering pad:



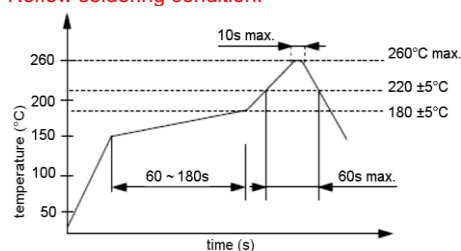
| PIN | Connection                   |
|-----|------------------------------|
| 1   | VC                           |
| 2   | NC                           |
| 3   | GND                          |
| 4   | OUTPUT                       |
| 5   | "L" (0V) "H" (+3.3V) or OPEN |
| 6   | V <sub>DD</sub>              |

Z= High Impedance

### Test circuit:



### Reflow soldering condition:



### Tape specification:

