

RoHS Compliant

### Features

- High stability and high reliability
- 2.7 to 5.5V drive available
- Clipped sine wave or CMOS level output
- Low phase noise
- Disable Function (KT7050A)

### Applications

- Femtocell, Stratum3
- SONET/ SDH/ Ethernet

### How to Order

#### For Femtocell (Standard Spec.)

Freq. Temp. Chrst. :  $\pm 0.1 \times 10^{-6} / -10^\circ\text{C}$  to  $70^\circ\text{C}$

KT7050 A 20000 A G T 33 T xx  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

#### For Stratum3 (Standard Spec.)

Freq. Temp. Chrst. :  $\pm 0.28 \times 10^{-6} / -40^\circ\text{C}$  to  $85^\circ\text{C}$

KT7050 A 20000 K A W 33 T xx  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

|                                    |                            |
|------------------------------------|----------------------------|
| ① Series                           | ⑥ Upper Operating Temp.    |
| ② Land Type                        | <b>T</b> +70°C             |
| <b>A</b> 10Pads                    | <b>W</b> +85°C             |
| <b>B</b> 4Pads                     | ⑦ Supply Voltage           |
| ③ Output Frequency                 | <b>33</b> 3.3V             |
| ④ Freq. Temp. Chrst.               | ⑦ Voltage Control Function |
| <b>A</b> $+0.1 \times 10^{-6}$     | <b>T</b> TCXO              |
| <b>K</b> $\pm 0.28 \times 10^{-6}$ | <b>Other*</b> VCTCXO       |
| ⑤ Lower Operating Temp.            | * Customer Spec.           |
| <b>A</b> -40°C                     | ⑨ Option Code              |
| <b>G</b> -10°C                     |                            |
| <b>J</b> 0°C                       |                            |

Packaging (Tape & Reel 1000 pcs./ reel)

- Compliant to the GR1244-Core & GR253-Core
- Recommended in Microsemi's ZLAN-68 app. note for Stratum3 applications based on tests performed by Kyocera.

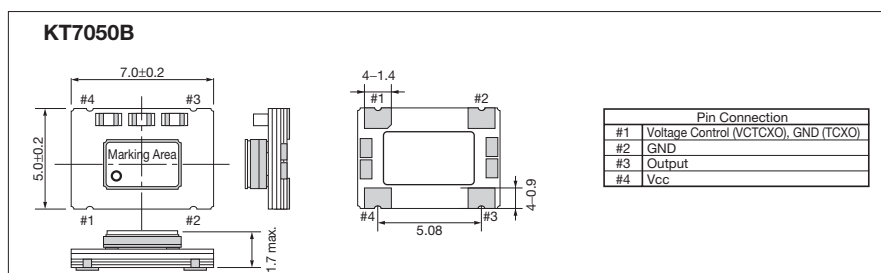
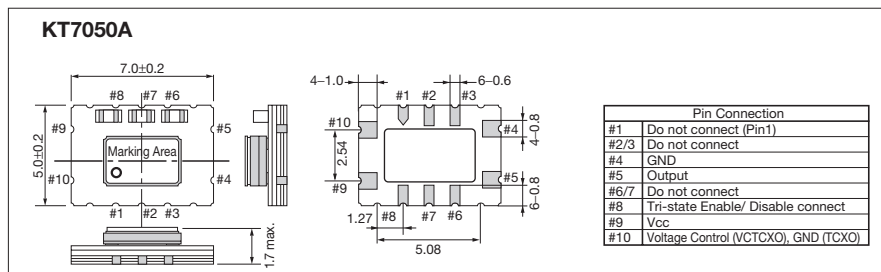
### Specifications

| Item   | Symbol            | Conditions  | Min.                | Max.                | Units            |
|--|-------------------|---|---------------------|---------------------|------------------|
| Output Frequency Range   | fo                | Standard Frequency: 10, 19.2, 20, 24.576, 26, 30.72, 38.88, 40  | 10                  | 40                  | MHz              |
| Frequency Tolerance  | f <sub>tol</sub>  | vs Temperature (-10 to +70°C) $[\pm(f_{\text{max}}-f_{\text{min}})/2f_0]$   | -0.1                | +0.1                | $\times 10^{-6}$ |
|  |                   | vs Temperature (-40 to +85°C) $[\pm(f_{\text{max}}-f_{\text{min}})/2f_0]$   | -0.28               | +0.28               |                  |
| Supply Voltage   | V <sub>CC</sub>   |   | +2.7                | +5.5                | V                |
| Current Consumption  | I <sub>CC</sub>   | CMOS output   | —                   | 6                   | mA               |
| Frequency Aging  | f <sub>age</sub>  | 20years aging @40°C Including temp characteristics, initial tolerance, rated power supply voltage change and load change. | -4.6                | +4.6                | $\times 10^{-6}$ |
| Voltage Control Range  | f <sub>cont</sub> | Positive *100k ohm min  | $\pm 5$             | $\pm 20$            | $\times 10^{-6}$ |
| Output Level   | V <sub>pp</sub>   | Clipped Sine, Load: 10k ohm // 10pF   | 0.8                 | —                   | Vp-p             |
| Low Level Output Voltage                                       | V <sub>OL</sub>   | CMOS, Load: 15pF I <sub>OL</sub> =4mA   | —                   | 10% V <sub>CC</sub> | V                |
| High Level Output Voltage                                      | V <sub>OH</sub>   | CMOS, Load: 15pF I <sub>OH</sub> =-4mA  | 90% V <sub>CC</sub> | —                   | V                |
| Rise / Fall Time (10% V <sub>CC</sub> to 90% V <sub>CC</sub> ) | tr/ tf            | CMOS, Load: 15pF  | —                   | 8                   | ns               |
| Symmetry   | SYM               | 50% V <sub>CC</sub>   | 45                  | 55                  | %                |
| Phase Noise @20MHz   | —                 | - 90 (@10Hz offset)<br>-120 (@100Hz offset)<br>-140 (@1kHz offset)<br>-150 (@10kHz offset)<br>-150 (@100kHz offset)       |                     |                     | dBc/ Hz          |

\* Please contact us for other specifications.

### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)

