

## FEATURE

- Voltage Controlled Crystal Oscillator (VCXO).
- Wide pull range and good linearity.
- Excellent low phase noise and jitter.
- RoHS Compliant / Pb Free.

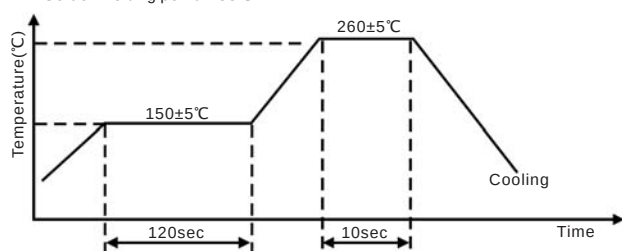


## ELECTRICAL SPECIFICATIONS

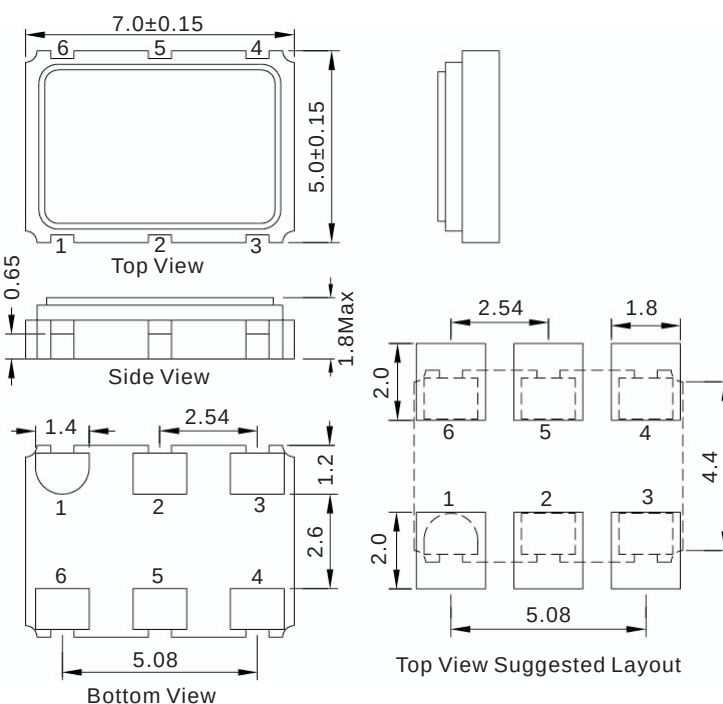
| Frequency Range                        | 1.000MHz ~ 80.000MHz                                                     |            | 80.000MHz ~ 250MHz                              |
|----------------------------------------|--------------------------------------------------------------------------|------------|-------------------------------------------------|
| Typical Frequency                      | 2.048MHz, 16.384MHz, 32.768MHz<br>61.44MHz, 70.656MHz, 77.76MHz          |            | 125.000MHz, 155.52MHz,<br>156.25MHz, 200.000MHz |
| Overall Frequency Stability            | ±25ppm ~ ±100ppm<br>(Inclusive of Operating Temp, Supply Voltage & Load) |            |                                                 |
| Operating Temperature                  | -10°C ~ +60°C to -40°C ~ +85°C                                           |            |                                                 |
| Storage Temperature                    | -40°C ~ +85°C / -55°C ~ +125°C                                           |            |                                                 |
| Supply Voltage                         | 5.0V                                                                     | 3.3V       | 3.3V                                            |
| Control Voltage                        | 2.5V±2.25V                                                               | 1.65V±1.5V | 1.65V±1.5V                                      |
| Input Current                          | 20mA Max                                                                 |            | 35mA Max                                        |
| Phase Noise                            | -140dBc/Hz @1KHz                                                         |            | -120dBc/Hz @1KHz                                |
| Phase Jitter (12KHz to 20MHz)          | 1ps Max                                                                  |            | 2.5ps Typical                                   |
| Symmetry (Duty Cycle)                  | 40/60% Std. / 45/55% Available                                           |            |                                                 |
| Rise/Fall Time                         | 6ns Max                                                                  |            |                                                 |
| Linearity                              | ±10% Max                                                                 |            |                                                 |
| Frequency Pulling Range                | ±50ppm ~ ±100ppm                                                         |            |                                                 |
| Output Load                            | 10TTL or 15pF HCMOS                                                      |            |                                                 |
| Aging @25°C 1 <sup>st</sup> year (Max) | ±3ppm, ±5ppm/year                                                        |            |                                                 |

## DIMENSIONS & REFLOW CONDITION

Total time: 200 sec Max  
Solder melting point: 185°C



| PIN | Connection      |
|-----|-----------------|
| 1   | N.C/Control V.  |
| 2   | Tri-state / NC  |
| 3   | GND             |
| 4   | Output          |
| 5   | NC / Tri-state  |
| 6   | V <sub>DD</sub> |



## PART NUMBER

|               |                        |                                        |                                         |                                   |                                                             |                       |
|---------------|------------------------|----------------------------------------|-----------------------------------------|-----------------------------------|-------------------------------------------------------------|-----------------------|
| GMK-VCXO7050- | 25.000                 | 50                                     | 3.3                                     | S                                 | B                                                           | 100                   |
|               | Frequency<br>25.000MHz | Overall<br>Freq.<br>Stability<br>50ppm | Supply<br>Voltage<br>5:5.0V<br>3.3:3.3V | Symmetry:<br>S:40/60%<br>T:45/55% | Operating<br>Temp<br>A:-10~60°C<br>B:-20~70°C<br>C:-40~85°C | Pullability<br>100ppm |