

## QKD Series

ROHS Compatible

Application:

- Microprocessor Systems
- Consumer Electronics

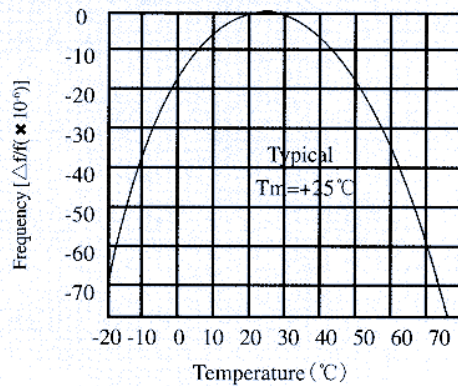
### Electrical Specifications

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Frequency                              | 32.768KHz                          |
| Frequency Tolerance (at 25°C)          | ±20ppm                             |
| ESR                                    | 65Kohm                             |
| Turnover Temperature                   | 25 ± 5°C                           |
| Frequency Temperature Curve            | -0.034(±0.006) ppm/°C <sup>2</sup> |
| Storage Temperature Range              | -55 °C to +125 °C                  |
| Operable Temperature Range             | -40 °C to + 85 °C                  |
| Shunt Capacitance (C0)                 | 0.8pF Typ                          |
| Dynamic Capacitance (C1)               | 1.9pF Typ                          |
| Driver Level (Typical)                 | 1 µW Max                           |
| Load Capacitance(C <sub>L</sub> )      | 12.5pF                             |
| Aging @25°C 1 <sup>st</sup> year (Max) | ±3ppm, ±5ppm/year                  |

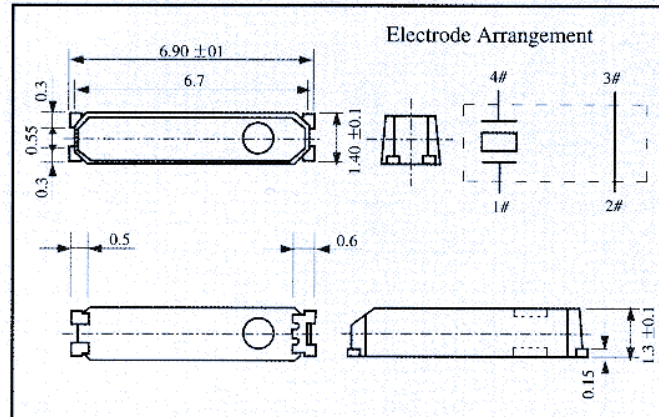
**REMARK:** SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.

## Packing and Dimensions

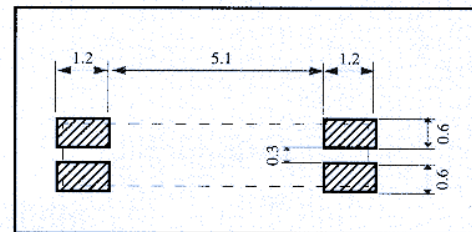
### ■ Tuning fork crystal units



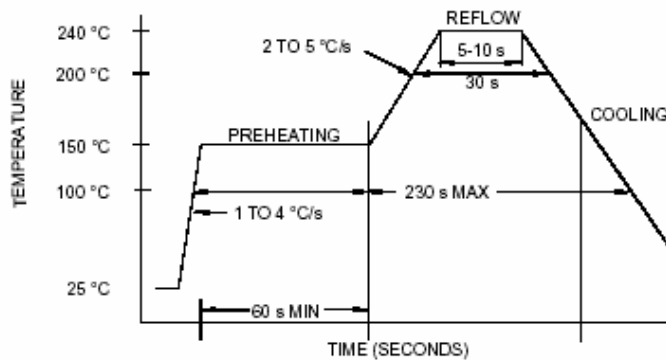
### ■ Dimensions: (unit=mm)



### ■ Recommended soldering pattern: (unit=mm)



## Reflow Soldering Profile



Part number:

|                                           |                                   |                            |                                                   |                 |                                                                    |
|-------------------------------------------|-----------------------------------|----------------------------|---------------------------------------------------|-----------------|--------------------------------------------------------------------|
| QKD                                       | 32.768                            | 12.5                       | 20                                                | 65              | C                                                                  |
| Model type:<br>SMD Tuning<br>fork<br>4pin | Frequency<br>32.768:<br>32.768KHz | Load capa.<br>12.5: 12.5pF | Frequency<br>tolerance:<br>50:±50ppm<br>20:±20ppm | ESR:<br>65:65KΩ | Temperature<br>range:<br>A:-10~+70°C<br>B:-20~+70°C<br>C:-40~+85°C |