

Static sensitive device

**Current part - Recommended for new designs**

#### Frequency Stability Options

| Frequency Stability Options |                | Frequency Stability (PPM) |     |
|-----------------------------|----------------|---------------------------|-----|
|                             |                | ±10                       | ±15 |
| Standard                    | -40°C to +85°C | E                         | G   |

#### Operating Conditions

Storage Temp -55°C to +125°C

#### Option Codes

| Variable | Option Code |
|----------|-------------|
| +3.3V DC | 33          |
| +2.8V DC | 30          |
| +2.5V DC | 25          |

#### Marking & Specification Code Format

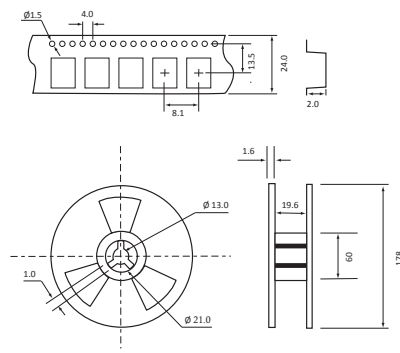
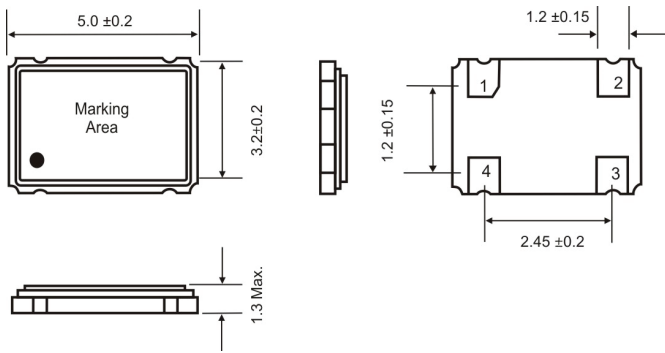
| Type  | Voltage Code    | OTR/Stability | Frequency | WWYY |
|-------|-----------------|---------------|-----------|------|
| SQ601 | See right panel | See Above     | ie 20.000 | 1608 |

#### Electrical Characteristics Ta = +25°C, Note Inclusive of V<sub>DD</sub> ±10%, Load Change ±10%, Ageing, Shock & Vibration

| Parameter           | Condition                                | V <sub>DD</sub> = +3.3V | V <sub>DD</sub> = +3.0V | V <sub>DD</sub> = +2.5V |
|---------------------|--|-------------------------|-------------------------|-------------------------|
| Input Current       | 15pF Load                                | 7.5mA Max.              |                         |                         |
| Frequency Stability | All Conditions <small>(See Note)</small> | See Options Above       |                         |                         |
| Symmetry            | @50% V <sub>DD</sub> Level               | 45/55%                  |                         |                         |
| Output Voltage      | "0" Level                                | 0.33V Max.              | 0.30V Max.              | 0.25V Max.              |
|                     | "1" Level                                | 2.97V Min.              | 2.70V Min.              | 2.25V Min.              |
| Rise Time           | 10% to 90% V <sub>DD</sub>               | 5nS Max.                |                         |                         |
| Fall Time           | 90% to 10% V <sub>DD</sub>               | 5nS Max.                |                         |                         |
| Start Up Time       | 0V to V <sub>DD</sub>                    | 5mS Max.                |                         |                         |
| Output Load         | HCMOS Load                               | 15pF Max.               |                         |                         |
| Phase Noise         | at 10kHz offset                          | -140dBc/Hz Typical      |                         |                         |

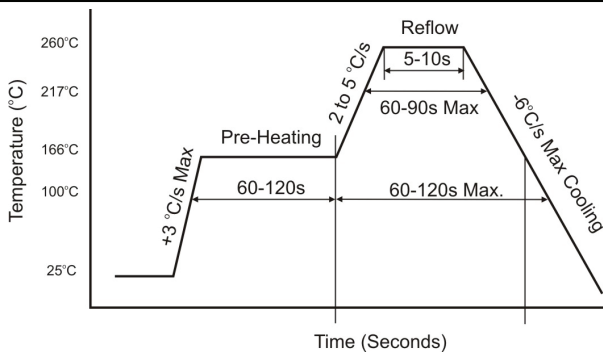
#### Dimensions (mm)

1,000pcs/Reel



#### Reflow Solder Profile (260°C)

#### Pin Connections



| Pad # | Connection      |
|-------|-----------------|
| #1    | E/D             |
| #2    | Ground          |
| #3    | Output          |
| #4    | V <sub>CC</sub> |

| Enable/Disable Function   |              |
|---------------------------|--------------|
| Pin 1 Input               | Pin 8 Output |
| Open                      | Enable O/P   |
| V <sub>IH</sub> ≥ 2.0V DC | Enable O/P   |
| V <sub>IH</sub> < 0.8V DC | Disable O/P  |