

## Clock Oscillator (时钟振荡器) - KJ506D

### Feature 特征

- Low phase jitter 0.6ps 低相位抖动
- Low current consumption 24mA for 622.080MHz@3.3V 低电流消耗



### Applications 应用

- Mobile communications, radar navigation, digital products, HD monitoring, precision instruments 移动通信, 雷达导航, 数码产品, 高清监控, 精密仪器等

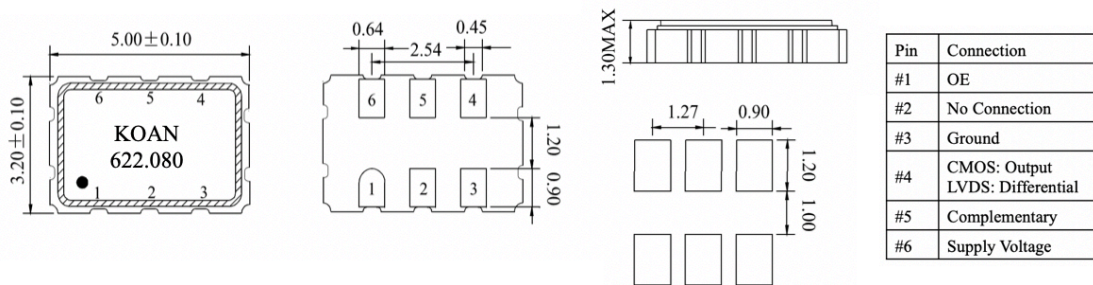
### General Specifications 规格参考

| PARAMETER                 | 性能参数   | KJ506D                               |
|---------------------------|--------|--------------------------------------|
| Frequency Range           | 频率范围   | 10.0MHz ~ 1.45GHz                    |
| Supply Voltage            | 供给电压   | +2.5V/3.3V (±10%)                    |
| Output Logic              | 输出波形   | LVDS                                 |
| Output Load               | 输出负载   | 100Ω between output and comp. output |
| Frequency Tolerance       | 调整频差   | ±5ppm ~ ±30ppm                       |
| Current Consumption       | 工作电流   | 28mA max                             |
| Output Logic High "1"     | 输出电平 高 | 1.4V typ. 1.6V max                   |
| Output Logic Low "0"      | 输出电平 低 | 1.1V typ. 0.9V min                   |
| Integrated Phase Jitter   | 抖动     | 0.6ps. typical (12KHz~20MHz)         |
| Rise & Fall Time          | 上升下降时间 | 0.5ns max                            |
| Start-up Time             | 起振时间   | 10ms max                             |
| Duty Cycle                | 占空比    | 45~55%                               |
| Aging Per Year            | 老化化率   | ±3ppm~±5ppm/year                     |
| Storage Temperature Range | 储存温度范围 | -55°C ~ +125°C                       |

| Frequency Stability 温度频差 VS Operating Temperature Range 温度范围 |           |     |     |     |     |      |
|--|-----------|-----|-----|-----|-----|------|
| Temp. Code   | Temp.\ppm | ±10 | ±20 | ±30 | ±50 | ±100 |
| B  | -20~70°C  | ○   | ○   | ○   | ○   | ○    |
| C  | -40~85°C  |     | ○   | ○   | ○   | ○    |
| D  | -20~105°C |     |     | ○   | ○   | ○    |
| E  | -40~105°C |     |     |     | ○   | ○    |
| F  | -55~105°C |     |     |     |     | ○    |
| G  | -20~125°C |     |     |     |     | ○    |

NOTE: Please consult for other specifications 若有其它规格需求请告知

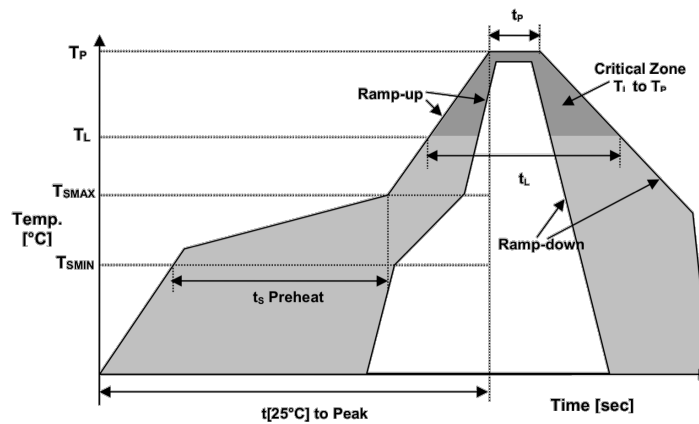
### Outline Dimensions (Unit: mm) 外形尺寸



## Part Number Guide 产品编号

| <u>KJ506D</u>  | - | <u>622.080</u> | - | <u>33</u>          | - | <u>C</u>   | - | <u>30</u>   | - | <u>NS</u> |
|--|---|----------------|---|--------------------|---|--|---|---|---|-----------|
| ↓  |   | ↓              |   | ↓                  |   | ↓  |   | ↓   |   | ↓         |
| 型号   | - | 标称频率           | - | 工作电压               | - | 工作温度   | - | 温度频差  | - | 特殊要求      |
| 'KJ':产品系列<br>J=低抖动<br>'506':封装尺寸<br>SMD<br>5.0x3.2mm 6 pad<br>'D':输出波形<br>LVDS |   | (In MHz)       |   | 25=2.5V<br>33=3.3V |   | B: -20~+70°C<br>C: -40~+85°C<br>D: -20~+105°C<br>E: -40~+105°C<br>F: -55~+105°C<br>G: -20~+125°C |   | 10 = ±10ppm<br>20 = ±20ppm<br>30 = ±30ppm<br>50 = ±50ppm<br>100 = ±100ppm |   | 'NS':特殊要求 |

## Reflow Profile 回流焊



|                                     |            |                 |             |
|-------------------------------------|------------|-----------------|-------------|
| Temperature Min Preheat             | 最低预热温度     | $T_{smin}$      | 150°C       |
| Temperature Max preheat             | 最高预热温度     | $T_{smax}$      | 200°C       |
| Time ( $T_{smin}$ to $T_{smax}$ )   | 时间差        | $T_s$           | 60~120 sec  |
| Temperature                         | 温度         | $T_L$           | 217°C       |
| Peak Temperature                    | 最高温        | $T_p$           | 260 °C      |
| Ramp-up Rate                        | 升温速度       | $R_{up}$        | 3°C/sec max |
| Ramp-down Rate                      | 降温速度       | $R_{down}$      | 6°C/sec max |
| Time within 5°C of Peak Temperature | 最高温度停留时间   | $t_p$           | 30 sec      |
| Time t[25°C] to peak temperature    | 25度到最高温度时间 | t[25°C] to peak | 480 sec     |
| Time                                | 时间         | $t_L$           | 60~150 sec  |