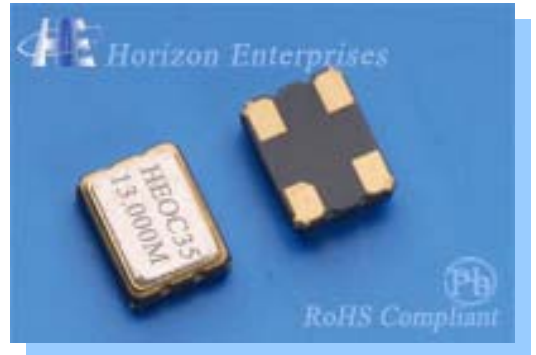


晶体振荡器 Crystals Oscillators Unit  
 产品型号 HEOC35- SMD OSC 3.2×2.5

产品特征 Features

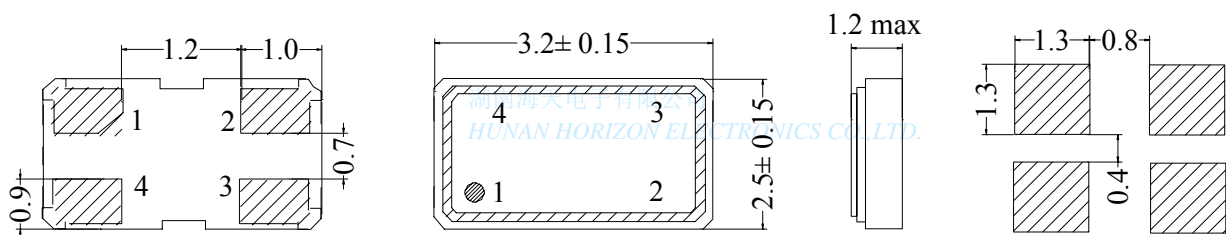
- 表面贴装时钟晶体振荡器  
 Surface Mount Clock Crystals Oscillators
- 兼容 TTL/HCOMOS Compatible



产品规格 Specification

| 电性能参数 Parameter   | 规格 Specification   |  |
|---|--|--|
| 频率范围 Frequency Range  | 1.544~ 50.000MHz   |  |
| 频率稳定度 Overall Frequency Stability<br>[包括工作稳度、电源电压和负载]   | ±25ppm~±100ppm<br>( Inclusive of Operating Temp., Supply Voltage & Load )                  |  |
| 工作温度 Operating Temperature  | -10℃~60℃ \ -40℃~85℃ ( See Options )  |  |
| 储存温度 Storage Temperature  | -40℃~85℃ \ -55℃~125℃   |  |
| 输入电压 Supply Voltage (V <sub>DC</sub> )  | <b>HEOC35A</b><br>+5.0±0.5 V <sub>DC</sub>   | <b>HEOC35B</b><br>+3.3±0.3 V <sub>DC</sub>     |
| 输入电流 Supply Current (I <sub>CC</sub> )  |  |  |
| 1.544 ~50.000 MHz   | 25mA max   | 20mA max                                       |
| 对称性 (占空比) Symmetry ( Duty Cycle )   | 40/60% Std./ 45/55% Avail. (See Options)   |  |
| 逻辑输出电平 Output "0" Level (V <sub>OL</sub> )  | <b>HEOC35A</b><br>0.4V <sub>DC</sub> max.(TTL)   | <b>HEOC35B</b><br>0.4V <sub>DC</sub> max.(TTL) |
|   | 0.4V <sub>DC</sub> max.(HCMOS)   | 0.4V <sub>DC</sub> max.(HCMOS)                 |
| 逻辑输出电平 Output "1" Level (V <sub>OH</sub> )  | 2.4V <sub>DC</sub> min.(TTL).  | 2.4V <sub>DC</sub> min.(TTL).                  |
|   | 2.7V <sub>DC</sub> min (HCMOS)   | 2.7V <sub>DC</sub> min (HCMOS)                 |
| 上升和下降时间 Rise and Fall Time  | 10ns max <5ns typical  |  |
| 启动时间 Start Time   | 10ms max <5ms typical  |  |
| 老化率 Ageing @ 25℃±3℃   | ±3 ppm first year  |  |
| 输出负载 Output Load  | 10TTL/ 50pf HCMOS (up to 24.0MHz)  |  |
|   | 10TTL/ 15pf HCMOS  |  |
| 三态功能 Tristate Function<br>( Pin 1 Has Internal Pull-up Resistor Allowing<br>It to be Left Floating High.) | V <sub>IH</sub> : 2.2v or Open Enables Output<br>V <sub>IL</sub> : 0.8v or Disables Output |  |
| 启用 \ 禁用时间   | OutputEnable \ Disable Time:100ns max  |  |
| 所有规格如有变更, 不另行通知。 All Specifications Subject to Change Without Notice.                                     |  |  |

外形尺寸 (单位:毫米) Figure and Dimensions(Unit: mm)



建议电路板印刷底座 Recommended Solder Pad Layout

| Pin | 功能 Function           | Pin | 功能 Function                         |
|-----|-----------------------|-----|-------------------------------------|
| 1   | 数控或三态 Nc or Tri-State | 3   | 输出 Output                           |
| 2   | 外壳接地 Case Ground      | 4   | 输入电压 Supply Voltage V <sub>DD</sub> |

**订购须知 Order Information**

**HEOC35□-Frequency- Temp.Range- Overall Freq.Stability-Duty Cycle-Option**

|                   |  |
|-------------------|--|
| <b>HEOC35□</b>    | 产品系列 Product Family SMD OSC 3.2×2.5  |
|                   | <ul style="list-style-type: none"> <li>■ HEOC31A for +5.0±0.5 V<sub>DC</sub></li> <li>■ HEOC31B for +3.3±0.3 V<sub>DC</sub></li> </ul>                 |
| <b>Frequency</b>  | 频率 Frequency( MHz)   |
| <b>Temp.Range</b> | 工作温度 Operating Temperature   |
|                   | <ul style="list-style-type: none"> <li>■ T<sub>1</sub> for -10℃~60℃</li> <li>■ T<sub>2</sub> for -40℃~85℃</li> <li>■ X for custom value</li> </ul>     |
| <b>Overall</b>    | 频率稳定度 Overall Frequency Stability  |
|                   | <ul style="list-style-type: none"> <li>■ H<sub>1</sub> for±25 ppm max</li> <li>■ H<sub>2</sub> for±50 ppm max</li> <li>■ X for custom value</li> </ul> |
| <b>Duty Cycle</b> | 对称性（占空比）Tight Symmetry (Duty Cycle)  |
|                   | A for Tight Symmetry (45/55%)Duty Cycle<br>B for Blank-None Required ( 40/60% Std )  |
| <b>Option</b>     | 选型 Option  |
|                   | <ul style="list-style-type: none"> <li>■ T For Tri-State</li> <li>■ N For No Connection</li> </ul>   |

**订购举例：Example : HEOC35B-20.000MHz--T<sub>1</sub>-H<sub>1</sub>-A-T**

|                      |   |
|----------------------|---|
| <b>HEOC35B</b>       | 产品系列 SMD OSC 3.2×2.5 - +3.3±0.3 V <sub>DC</sub>             |
| <b>20.000MHz</b>     | 频率 Frequency \ f <sub>0</sub> =20.000MHz                    |
| <b>T<sub>1</sub></b> | 工作温度 Operating Temperature \ T <sub>1</sub> =-10℃~60℃       |
| <b>H<sub>1</sub></b> | 频率稳定度 Overall Frequency Stability \ H <sub>1</sub> =±25 ppm |
| <b>A</b>             | 对称性（占空比）Symmetry (Duty Cycle)                               |
|                      | A for Tight Symmetry (45/55%)Duty Cycle                     |
| <b>T</b>             | 选型 Option \ T For Tri-State                                 |

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