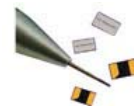


# WX20B Series

## 2.0 x 1.2mm Watch crystal

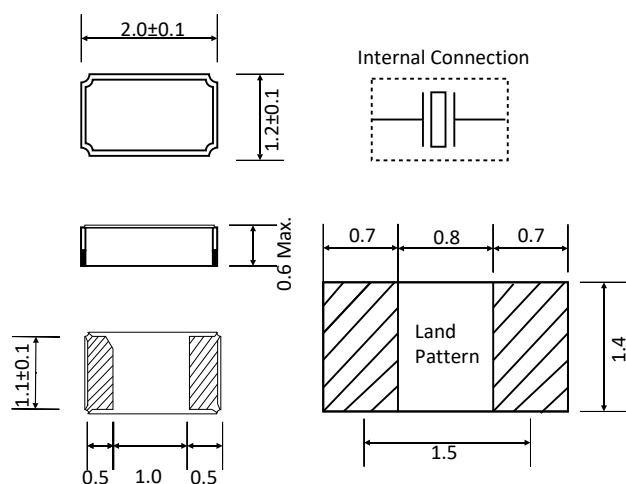


RoHS & REACH compliant  
Vacuum sealed miniature ceramic package for excellent stability  
Low power consumption  
Suitable for UAVs and Drones

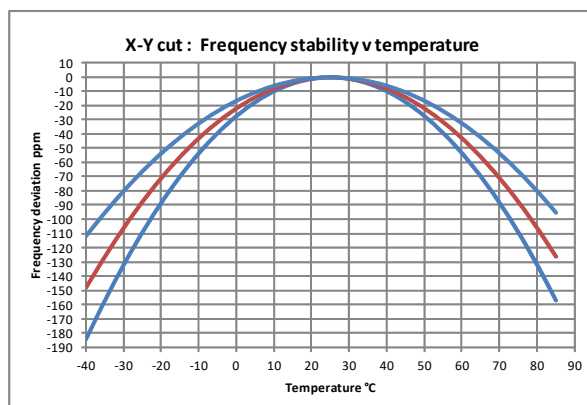


| Parameters                   |                  | Specification              | Remarks                                                    |
|------------------------------|------------------|----------------------------|------------------------------------------------------------|
| Frequency                    | F <sub>nom</sub> | 32.768kHz                  | Fundamental                                                |
| Frequency tolerance          | F <sub>tol</sub> | ±20ppm                     | At 25°C ± 3°C                                              |
| Operating temperature range  | T <sub>use</sub> | -40°C ~ +85°C              |                                                            |
| Storage temperature          | T <sub>stg</sub> | -55°C ~ +125°C             |                                                            |
| Temperature coefficient      | K                | -0.04 ppm/Δ°C <sup>2</sup> |                                                            |
| Turnover temperature         | Ti               | 25°C ± 5°C                 |                                                            |
| Load capacitance             | CL               | 7pF, 9pF, 12.5pF           | Other load capacitances are available - please contact ACT |
| Equivalent series resistance | ESR              | 80KΩ max                   | Other lower ESR options are available - please contact ACT |
| Shunt capacitance            | C0               | 2.0pF max                  |                                                            |
| Drive level                  | DL               | 0.1μW typical              | 0.5μW max                                                  |
| Frequency aging              | F <sub>age</sub> | ±3.0ppm max                | At 25°C, First year                                        |
| Insulation resistance        | IR               | 500MΩ min                  | At DC100V ± 15V                                            |

Dimensions (mm)



Frequency stability vs temperature



Part number generation

| WXB             | 00003             | G                          | I                                | H                                    | D                               | -PF        |
|-----------------|-------------------|----------------------------|----------------------------------|--------------------------------------|---------------------------------|------------|
| ACT Series Code | Frequency (KHz)   | Frequency Tolerance (±ppm) | Operating Temperature Range (°C) | Load capacitance (CL)                | Packaging (Tape & Reel)         | RoHS       |
| WXB             | 32.768kHz = 00003 | ±20 = G                    | -40 ~ +85 = I                    | 7.0pF = M<br>9.0pF = K<br>12.5pF = H | Loose/Sample = L<br>3000pcs = D | RoHS = -pF |

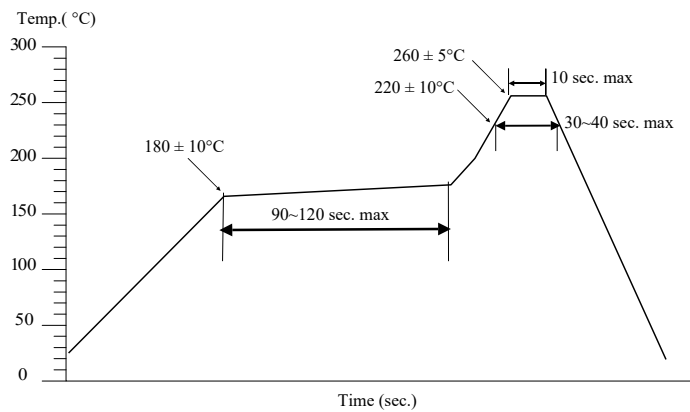
Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below.  
Full Example Part Number : **WXB00003GIHD-PF (32.768kHz)**

# WX20B Series

2.0 x 1.2mm Watch crystal



## Reflow profile



## Additional information

Drawing control: (Internal use only)  
Commodity code: 854 160 00 00  
Issue number: N1  
Date: 1/03/2019  
Internal reference: H2

**ACT (A wholly owned Acal BFi Company)**  
**+44 (0) 118 978 8878 | [sales@act.co.uk](mailto:sales@act.co.uk) | [www.act.co.uk](http://www.act.co.uk)**  
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