

2.0×1.2mm for Consumer/ Mobile Equipment



**RoHS Compliant**

**Features**

- Ultra Small, Low Profile
- Ceramic Package
- Reflow Compatible

**Applications**

- Consumer/ Mobile Equipment

**How to Order**

**ST2012SB 32768**

- ① Series
- ② Frequency 32.768kHz
- ③ Load Capacitance
- ④ Frequency Tolerance
- ⑤ Operating Temp. Range
- ⑥ Frequency Temp. Stability
- ⑦ Individual Specification

|           |         |      |
|-----------|---------|------|
| <b>H5</b> | 12.5 pF | Std. |
| <b>E0</b> | 9.0 pF  |      |
| <b>C0</b> | 7.0 pF  |      |
| <b>B0</b> | 6.0 pF  |      |
| <b>A0</b> | 5.0 pF  |      |
| <b>Z0</b> | 4.0 pF  |      |

|          |                         |
|----------|-------------------------|
| <b>H</b> | $\pm 20 \times 10^{-6}$ |
|----------|-------------------------|

|          |                          |
|----------|--------------------------|
| <b>P</b> | -40 to +85°C             |
| <b>W</b> | $\pm 200 \times 10^{-6}$ |

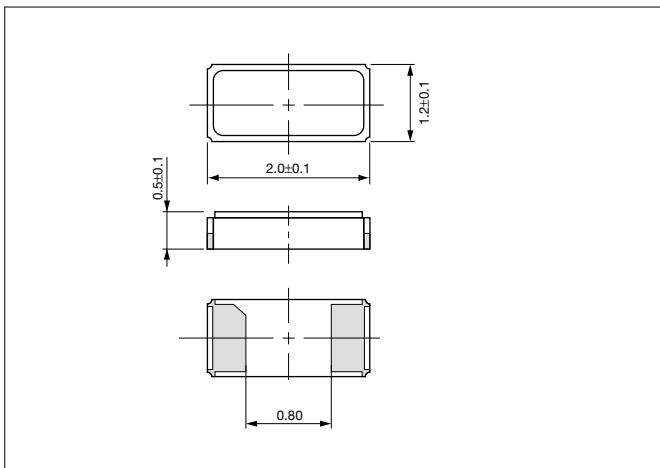
Packaging (Tape & Reel 3000/ 12000 pcs./ reel)

**Specifications**

| Item                  | Symbol           | Specification                 | Units                               | Remarks           |
|-----------------------|------------------|-------------------------------|-------------------------------------|-------------------|
| Nominal Frequency     | f <sub>nom</sub> | 32.768                        | kHz                                 |                   |
| Frequency Tolerance   | f <sub>tol</sub> | ±20                           | ×10 <sup>-6</sup>                   | 25°C±3°C          |
| Turnover Temperature  | T <sub>i</sub>   | +25±5                         | °C                                  |                   |
| Parabolic Coefficient | B                | -0.04 max.                    | ×10 <sup>-6</sup> / °C <sup>2</sup> |                   |
| Motional Resistance   | R <sub>1</sub>   | 80 max.                       | k-ohm                               |                   |
| Motional Capacitance  | C <sub>1</sub>   | 5.8 typ.                      | fF                                  |                   |
| Shunt Capacitance     | C <sub>0</sub>   | 1.3 typ.                      | pF                                  |                   |
| Load Capacitance      | CL               | 4.0/ 5.0/ 6.0/ 7.0/ 9.0/ 12.5 | pF                                  | Please contact us |
| Drive Level           | DL               | 0.1                           | μW                                  | 0.5 max.          |
| Operating Temp. Range | T <sub>use</sub> | -40 to +85                    | °C                                  |                   |
| Storage Temp. Range   | T <sub>stg</sub> | -40 to +85                    | °C                                  |                   |
| Frequency Aging       | f <sub>age</sub> | ±3                            | ×10 <sup>-6</sup>                   |                   |

**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)

