

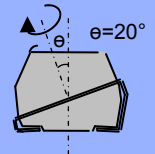
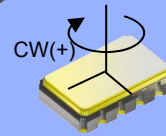
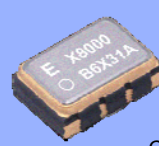
**GYRO SENSOR  
FOR AUTOMOTIVE**



Product number (please contact us)  
**XV-8000CB: Q71800020xxxx00**  
**XV-8000LK: X2A000011xxxx00**

**XV-8000CB / LK**

- 5.0V operable device (Ratio metric output)
  - High stability using vibration crystal
  - With output terminal of temperature sensor
  - External dimensions: 5.0 x 3.2 x 1.3 mm ... XV-8000CB  
6.0 x 4.8 x 3.3 mm ... XV-8000LK
  - Inclined angle: 20 degrees (XV-8000LK)
  - Conforms to AEC-Q200
- Recommended Application**
- Car navigation system, Telematics



Actual size

XV-8000CB

XV-8000LK



**Specifications (characteristics)**

| Item                | Symbol                | Specifications                   | Conditions / Remarks                      |
|---------------------|-----------------------|----------------------------------|-------------------------------------------|
| Supply Voltage      | V <sub>DD</sub>       | 5.0 V ±0.25 V                    |                                           |
| Temperature range   | Storage Temperature   | T <sub>STG</sub>                 | -40 °C to +85 °C                          |
|                     | Operating Temperature | T <sub>OPR</sub>                 | -40 °C to +85 °C                          |
| Scale factor        | S <sub>o</sub>        | 0.005 × V <sub>DD</sub> mV/(°/s) |                                           |
| Bias                | V <sub>o</sub>        | 0.5 × V <sub>DD</sub> V Typ.     | T <sub>a</sub> =+25 °C                    |
| Rate range          | I                     | ±60 °/s                          |                                           |
| Non linearity       | NL                    | ±0.5 % FS                        | T <sub>a</sub> =+25 °C                    |
| Frequency response  | BW                    | 10 Hz Typ.                       | Phase delay angle 90°                     |
| Cross axes          | OS                    | ±5 %                             | T <sub>a</sub> =+25 °C                    |
| Current consumption | I <sub>op</sub>       | 4 mA Typ.                        | V <sub>o</sub> : Output No load condition |
| Noise               | r <sub>N</sub>        | 3 mVp-p Typ.                     |                                           |

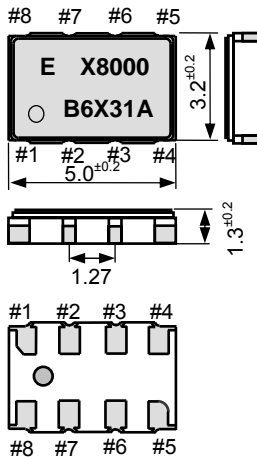
Product Name                    **XV-8000 CB**    \*\* \*\*\*\*\* kHz  
 (Standard form)                    ①                    ②                    ③

①Model    ②Package type(CB: Ceramic 5032 size, LK: Lead frame K-Type)    ③Frequency (not necessary to specify )

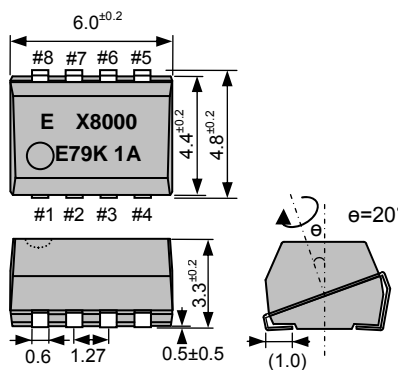
**External Dimensions**

(Unit:mm)

**•XV-8000CB**



**•XV-8000LK**



**Pin map**

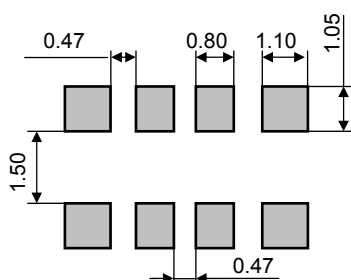
| Pin | Connection        |
|-----|-------------------|
| 1   | N.C.              |
| 2   | GND               |
| 3   | V <sub>DD</sub>   |
| 4   | N.C.              |
| 5   | N.C.              |
| 6   | V <sub>OUT</sub>  |
| 7   | V <sub>TEMP</sub> |
| 8   | N.C.              |

Do not connect "N.C." pins externally.

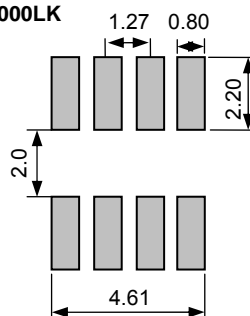
**Footprint (Recommended)**

(Unit:mm)

**•XV-8000CB**



**•XV-8000LK**



## PROMOTION OF ENVIRONMENTAL MANAGEMENT SYSTEM CONFORMING TO INTERNATIONAL STANDARDS

At Seiko Epson, all environmental initiatives operate under the Plan-Do-Check-Action (PDCA) cycle designed to achieve continuous improvements. The environmental management system (EMS) operates under the ISO 14001 environmental management standard.

All of our major manufacturing and non-manufacturing sites, in Japan and overseas, completed the acquisition of ISO 14001 certification.

ISO 14000 is an international standard for environmental management that was established by the International Standards Organization in 1996 against the background of growing concern regarding global warming, destruction of the ozone layer, and global deforestation.

## WORKING FOR HIGH QUALITY

In order provide high quality and reliable products and services than meet customer needs,

Seiko Epson made early efforts towards obtaining ISO9000 series certification and has acquired ISO9001 for all business establishments in Japan and abroad. We have also acquired ISO/TS 16949 certification that is requested strongly by major automotive manufacturers as standard.

ISO/TS16949 is the international standard that added the sector-specific supplemental requirements for automotive industry based on ISO9001.

### ► Explanation of the mark that are using it for the catalog

|                                                                                     |                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | ► Pb free.                                                                                                                                                                                                                      |
|  | ► Complies with EU RoHS directive.<br>*About the products without the Pb-free mark.<br>Contains Pb in products exempted by EU RoHS directive.<br>(Contains Pb in sealing glass, high melting temperature type solder or other.) |
|  | ► Designed for automotive applications such as Car Multimedia, Body Electronics, Remote Keyless Entry etc.                                                                                                                      |
|  | ► Designed for automotive applications related to driving safety (Engine Control Unit, Air Bag, ESC etc.)                                                                                                                       |

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