

**MINIATURE SIZE GYRO SENSOR
(FOR Automotive)**
XV-9100LV / LP
XV-9300LV / LP



NEW



Product number (please contact us)
 XV-9100LV: X2A000031xxxx00
 XV-9100LP: X2A000041xxxx00
 XV-9300LV: X2A000051xxxx00
 XV-9300LP: X2A000061xxxx00

- Wide temperature support, up to +125degree, good for engine room usage.
- High reliability by installing the self diagnosis function
- Ultra small and light weight using the original Double-T structure quartz crystal element.
- Excellent performance of shock-resistance and vibration-resistance.
- High reliability and connectivity to PCB using J-lead terminal.

Recommended Application

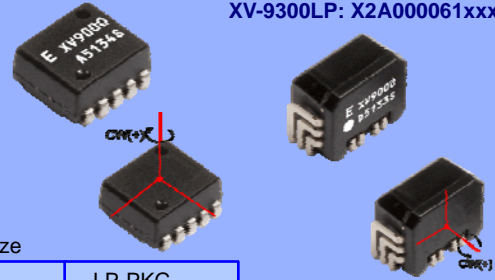
- Electric Stability Control System / Rollover Protection System

Actual size

LV-PKG



LP-PKG



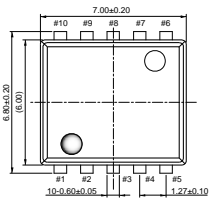
Specifications (characteristics)

| Item | Symbol | Specifications | | Conditions / Remarks |
|---------------------|-----------------------|--------------------|---------------------|-------------------------------|
| | | XV-9100LV / LP | XV-9300LV / LP | |
| Supply Voltage | VDD | 5.0 V ±0.25 V | | Vss=0 V |
| Temperature range | Storage Temperature | -40 °C to +125 °C | | |
| | Operating Temperature | -40 °C to +125 °C | | |
| Scale factor | So | 0.004*VDD mV/(°/s) | 0.0012*VDD mV/(°/s) | |
| Bias | Vo | 0.5*VDD V Typ. | | |
| Rate range | I | ±100 °/s | ±300 °/s | |
| Non linearity | NL | ±0.5 % FS | | Ta=+25 °C |
| Frequency response | BW | 10 Hz Typ. | 50 Hz Typ. | -3dB point |
| Cross axes | OS | ±5 % | | Ta=+25 °C |
| Current consumption | Iop | 5.5 mA Typ. | | Vo : Output No load condition |
| Noise | rN | 1.0 (°/s) p-p Max. | 3.3 (°/s) p-p Max. | 5kHz sampled at 200ms |
| Start-up time | TACT | 300 ms Max. | | |

External Dimensions

(Unit:mm)

•XV-9100LV / XV-9300LV

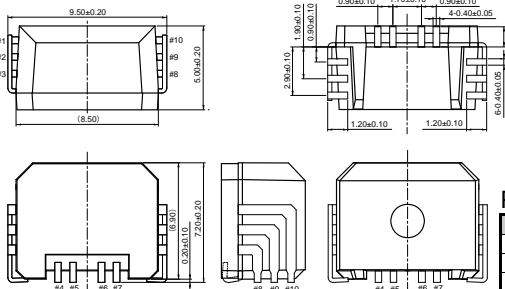


Pin map

| Pin | XV-9100/9300LV |
|-----|----------------|
| 1 | GND |
| 2 | CLK |
| 3 | DIAG |
| 4 | VDD |
| 5 | GND |
| 6 | N.C. |
| 7 | Vout |
| 8 | GND |
| 9 | CHECK |
| 10 | N.C. |

Do not connect "N.C." pins externally

•XV-9100LP / XV-9300LP



Pin map

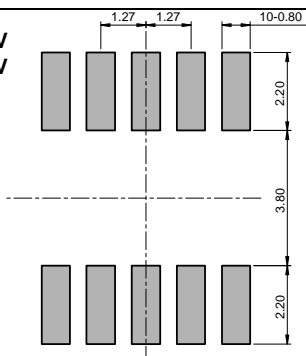
| Pin | XV-9100/9300LP |
|-----|----------------|
| 1 | CHECK |
| 2 | GND |
| 3 | Vout |
| 4 | N.C. |
| 5 | N.C. |
| 6 | GND |
| 7 | GND |
| 8 | VDD |
| 9 | DIAG |
| 10 | CLK |

Do not connect "N.C." pins externally

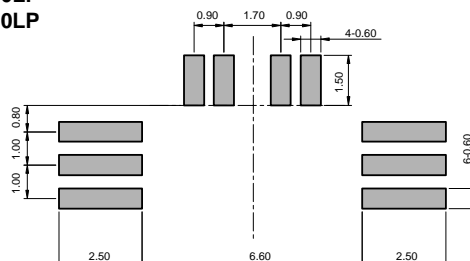
Footprint (Recommended)

(Unit:mm)

**•XV-9100LV
•XV-9300LV**



**•XV-9100LP
•XV-9300LP**



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

| | |
|---|---|
|  | <p>► Pb free.</p> |
|  | <p>► Complies with EU RoHS directive. *About the products without the Pb-free mark. Contains Pb in products exempted by EU RoHS directive. (Contains Pb in sealing glass, high melting temperature type solder or other.)</p> |
|  | <p>► The products have been designed for high reliability applications such as Automotive.</p> |

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