

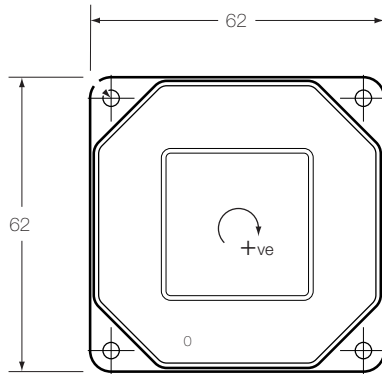
CRS09A

Angular Rate Sensor



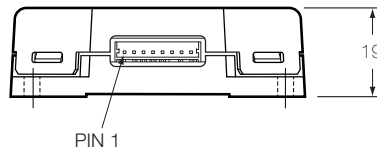
For full technical datasheets please go to our website where the documents can be downloaded

All dimensions in millimetres



Connector: 53254-0870 (Molex)
Mating Connector: 51065-0800 (Molex)
(This connector with 500mm cable is included with each CRS09A).
Note that the Manufacturer's (Molex) identification of Pin 1 should be Ignored.

See Technical Datasheet for more information.



Typical Data

| | CRS09A-01 | CRS09A-02 |
|----------------------------------|--|-----------|
| | CRS09A-11 | CRS09A-12 |
| Angular Rate Range | ±200°/s | ±100°/s |
| Output | Analogue (non-ratiometric) | |
| Scale Factor | | |
| Nominal | 10mV/°/s | 20mV/°/s |
| Setting tolerance (23°C) | ±1% | |
| Variation over temperature range | < ±1% | |
| Non-linearity | 0.1% of full scale | |
| Bias | | |
| Setting tolerance (23°C) | < ±1°/s | |
| Variation over temperature range | < ±3°/s (CRS09-01 and CRS09-02) < ±1°/s (CRS09-11 and CRS09-12) | |
| Angular Random Walk | 0.1°/rt hr | |
| Bias instability | 3°/hr | |
| Bandwidth (typical) | 55Hz | |
| Quiescent Noise | | |
| 3 to 30Hz | 0.03°/s rms | |
| Environment | | |
| Temperature | -40°C to +85°C | |
| Linear acceleration | tba | |
| Shock | tba | |
| Vibration | 10g rms (20Hz to 2kHz, random) | |
| Cross-axis sensitivity | 2% | |
| Mass | 60 grams | |
| Electrical | | |
| Supply voltage | +4.75V to +5.25V | |
| Supply current | 100mA (steady state) | |
| Noise and ripple | < 15mV (0.5Hz to 100Hz) | |
| Start-up time | < 0.5s | |
| RoHS Compliant | Yes | |

Pin Connections

| | |
|---|----------------|
| 1 | GND |
| 2 | +5V |
| 3 | Rate Output |
| 4 | Reference |
| 5 | TMP |
| 6 | Do Not Connect |
| 7 | FRQ |
| 8 | Not Connected |

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