## AC-CAP2-50

2 axis capacitive accelerometer 50G SN: A\#\#\#\#\#\#\#\#

Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

| Measurement features |  |  |  |
| :---: | :---: | :---: | :---: |
| Range |  | $\pm 50$ | G |
| Sensitivity |  | $40 \pm 8 \%$ | $\mathrm{mV} / \mathrm{G}$ |
| Sensitivity drift | $20^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$ | $\pm 2.5$ | \% |
|  | $20^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ | $\pm 4$ |  |
| Signal at 0 G |  | $2.500 \pm 0.040$ | V |
| Offset drift | $\begin{gathered} 20^{\circ} \mathrm{C} \text { to } 80^{\circ} \mathrm{C} \\ 20^{\circ} \mathrm{C} \text { to } 125^{\circ} \mathrm{C} \end{gathered}$ | $\pm 20$ | mV |
|  |  | $\pm 30$ |  |
| $\begin{gathered} \text { Cut-off frequency } \\ -3 \mathrm{~dB} \\ ( \pm 10 \%) \end{gathered}$ | cy Min | 40 | Hz |
|  | Default | 270 |  |
|  | Max | 400 |  |
| Calibrator |  | LDS V406 |  |
| Resonance |  | 24 | kHz |
| Max Cross axis sensitivity |  | 3 | \% |
| Electrical features |  |  |  |
| Supply Voltage |  | 5.5 to 16 | V |
| Supply Current |  | < 3 | mA |
| Output Voltage |  | 0-5 | V |
| Output Impedance |  | $<10$ | $\Omega$ |
| Mechanical features |  |  |  |
| Dimensions |  | $25 \times 16 \times 8$ | mm |
| Material |  | Aluminium |  |
| Weight |  | 15 | g |
| Protection |  | IP66 |  |
| Environment |  |  |  |
| Shock |  | 1000 | G |
| Insulation under 50V ${ }_{\text {DC }}$ |  | $>55$ | $\mathrm{M} \Omega$ |
| Operating Temp |  | -20 to +125 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temp |  | -40 to +125 | ${ }^{\circ} \mathrm{C}$ |


| Date |  |
| :---: | :---: |
| Customer |  |
| Order |  |
| Product Ref | AC-CAP2-50-\#\#\# |


| Sensor readings |  |  |
| :---: | :---: | :---: |
| Axis | X | Y |
| Signal @-1G | $\ldots \mathrm{V}$ | $\ldots . \mathrm{V}$ |
| Signal @ 0G | $\ldots \mathrm{V}$ | $\ldots \mathrm{V}$ |
| Signal @ +1G | $\ldots \mathrm{V}$ | $\ldots \mathrm{V}$ |
| Sensitivity | $\ldots \mathrm{mV} / \mathrm{G}$ | $\ldots \mathrm{mV} / \mathrm{G}$ |
| Cut off frequency <br> at -3 dB | $\ldots \mathrm{Hz}$ | $\ldots \mathrm{Hz}$ |
| Cross Axis | $\ldots \%$ | $\ldots \%$ |


| Cable |  |  |
| :---: | :---: | :---: |
| 4x26AWG FEP tinned copper braided cable $250 \mathrm{~V} 200^{\circ} \mathrm{C}$ <br> Length: 1000 mm <br> Connector: on request | Function | Pin |
| Color | Supply | - |
| Red | OV | - |
| Black | Signal X | - |
| White | Signal Y | - |
| Green | Not connected |  |
| Braid |  |  |


| Standard calibration table |  |
| :---: | :---: |
| Acceleration <br> $(\mathrm{G})$ | Output signal <br> $\mathrm{V})$ |
| -50 | 0.500 |
| -40 | 0.900 |
| -30 | 1.300 |
| -20 | 1.700 |
| -10 | 2.100 |
| 0 | 2.500 |
| +10 | 2.900 |
| +20 | 3.300 |
| +30 | 3.700 |
| +40 | 4.100 |
| +50 | 4.500 |

## Mechanical drawing



Example of Texense inertial units installation


The mounting holes enable to build a compact custom inertial system, mixing accelerometers and gyroscopes.

## Ordering information



