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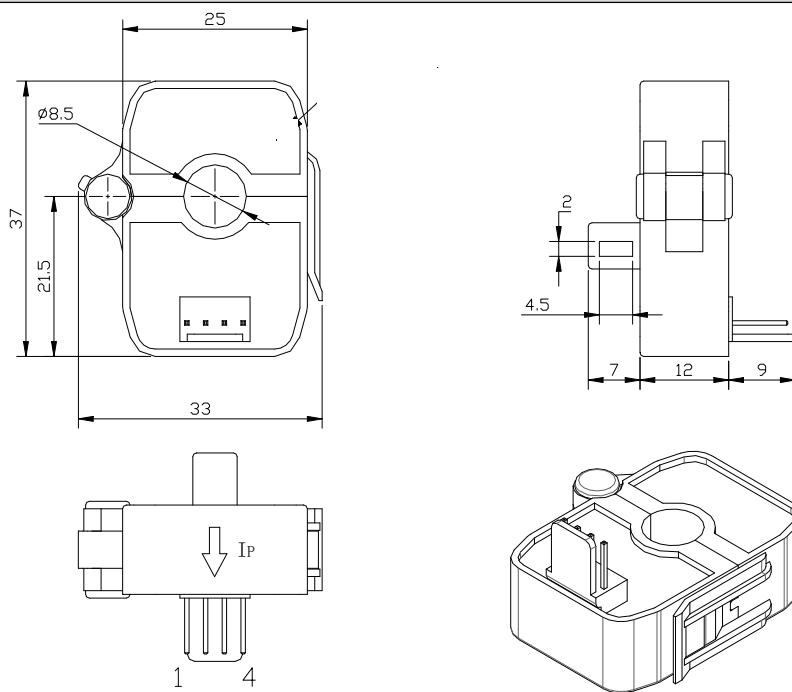
# CS050EKET12H Hall-effect Current Sensor Series



Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

| Electrical characteristics |                                    |  |              |              |              |     |
|----------------------------|------------------------------------|--|--------------|--------------|--------------|-----|
|                            | Type                               | CS010EKET12H                                 | CS020EKET12H | CS025EKET12H | CS050EKET12H |     |
| I <sub>PN</sub>            | Primary nominal input current      | 10   | 20           | 25           | 50           | A   |
| I <sub>P</sub>             | Measuring range of primary current | 0~±20  | 0~±40        | 0~±50        | 0~±80        | A   |
| V <sub>OUT</sub>           | Nominal output voltage             | ±1 (±1%)                                     |              |              |              | V   |
| V <sub>C</sub>             | Supply voltage                     | +12(±5%)                                     |              |              |              | V   |
| I <sub>C</sub>             | Current consumption                | 10   |              |              |              | mA  |
| V <sub>d</sub>             | Insulation voltage                 | AC/50Hz/1min                                 |              |              |              | kV  |
| ε <sub>L</sub>             | Linearity                          | ±1   |              |              |              | %FS |
| V <sub>0</sub>             | Offset voltage                     | T <sub>A</sub> =25°C                         |              |              |              | V   |
| V <sub>OM</sub>            | Residual voltage                   | I <sub>PN</sub> →0                           | <±10         |              |              |     |
| V <sub>OT</sub>            | Thermal drift of V <sub>0</sub>    | I <sub>PN</sub> =0 T <sub>A</sub> =-25~+85°C | <±0.5        |              |              |     |
| Tr                         | Response time                      | ≤1   |              |              |              | ms  |
| f                          | Frequency bandwidth(-3dB)          | DC~2.2                                       |              |              |              | kHz |
| T <sub>A</sub>             | Ambient operating temperature      | -25~+85                                      |              |              |              | °C  |
| T <sub>S</sub>             | Ambient storage temperature        | -40~+100                                     |              |              |              | °C  |
| R <sub>L</sub>             | Load resistance                    | ≥4.7   |              |              |              | KΩ  |
| m                          | Mass                               | 21   |              |              |              | g   |
|                            | Standard                           | Q/320115QHKJ01-2010                          |              |              |              |     |

## Dimensions of drawing (mm)



Elucidation: 1:+12V 2:NC 3:V<sub>OUT</sub> 4:0V(GND)

## Remarks

- Incorrect connection may lead to the damage of the sensor.
- V<sub>OUT</sub> is positive when the I<sub>P</sub> flows in the direction of the arrow.