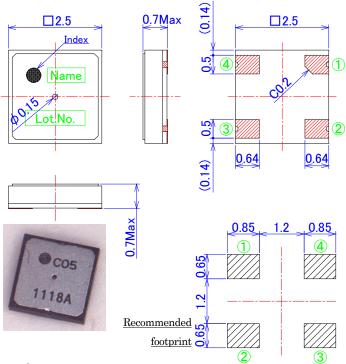
# **HDK**

# Barometric Pressure Sensor

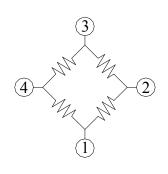
#### Model No HPD-100A-C05L

Our pressure sensor which applied piezo-resistive effect on MEMS technology as a core, has been mass-produced and shipped more than 40 million pieces since 1993. We have gained high reputation for long-nurtured piezo resistor technology as sensor of high performance and high reliability.

#### Outline Dimension



#### Equivalent circuit



| Pin No. | Item    |  |  |
|---------|---------|--|--|
| 1       | GND     |  |  |
| 2       | +Output |  |  |
| 3       | Icc     |  |  |
| 4       | -Output |  |  |

### ■ Basic-specification

#### Maximum Rating

| ltem                        | Rating            | Unit | Remark |
|-----------------------------|-------------------|------|--------|
| Pressure Type               | Absolute pressure | _    |        |
| Pressure Range              | 25 ~ 300          | kPa  |        |
| Maximum Drive Current       | 3                 | mA   |        |
| Operating Temperature Range | -20 <b>~</b> +85  | °C   |        |
| Storage Temperature Range   | -40 <b>~</b> +150 | °C   |        |

## Electrical Characteristics (lcc=0.55mA, Ta=25°C)

| ltem                                       | Rating |      |      | Uinit | Remark    |
|--|--------|------|------|-------|-----------|
|  | Min.   | Тур. | Max. | Offit | Nemark    |
| Rated Pressure                             | 50     | -    | 110  | kPa   |           |
| Drive Current                              | ı      | 0.55 | ı    | mA    |           |
| Bridge Resistance                          | 4      | 6    | 8    | kΩ    |           |
| Offset Voltage                             | 60     | 80   | 100  | mV    | at 110kPa |
| Span Voltage                               | 30     | 45   | 60   | mV    |           |
| Pressure Linearity                         | -1     | 0    | 1    | %FS   |           |
| Offset Voltage Temperature Characterictics | -5     | -    | 10   | %FS   | at 110kPa |
| Span Voltage Temperature Characterictics   | -4     | -    | 8    | %FS   |           |