



## ■ PM2.5 Sensor Module

### ◆ Features

- (1) Easy assembly for use in air purifiers and other products thanks to small size of 53 × 40 × 51 mm
- (2) Industry's shortest\*<sup>1</sup> detection time of 10 seconds
- (3) Digital output model is also part of line-up

\*<sup>1</sup> As of May 1, 2015 (measured by Sharp)



### ◆ Standard Specifications

| Model No.                            | DN7C3CA007<br>[Overseas]                                    | DN7C3CD015<br>[Japan / Overseas]                |
|--------------------------------------|-------------------------------------------------------------|-------------------------------------------------|
| Measuring range (μg/m <sup>3</sup> ) | 25 to 500                                                   | 25 to 500                                       |
| Output type                          | Analog voltage                                              | Digital PWM                                     |
| Power supply voltage (Vcc/fan)       | DC5 V / DC5 V                                               | DC5 V / DC5 V                                   |
| Power consumption (mW) (TYP.)        | At sensor: 55,<br>At fan: 700 [JA001, CA006]<br>450 [CA007] | At sensor: 75,<br>At fan: 450                   |
| Output voltage range (V)             | 0 to 3.4 (MIN.)                                             | Vhigh: Vcc-1.5 (MIN.),<br>Vlow: 1.3 (MAX.)      |
| Operating temperature range (°C)     | -10 to +60                                                  | -10 to +60                                      |
| Outline dimensions (mm)              | 53.0 × 40.0 × 51.0 (excluding protruding parts)             | 53.0 × 40.0 × 51.0 (excluding protruding parts) |

## ■ Temperature and Humidity Sensor

### ◆ Features

- (1) Package: 3.0 x 3.0 x 0.8 mm, reflowable, QFN
- (2) High-speed response: Approx. 7 sec.\*<sup>1</sup>
- (3) Interface: I<sup>2</sup>C

\*<sup>1</sup> For 63% of humidity change



### ◆ Standard Specifications

| Model No.       | QM1H0P0073             |                    |
|-----------------|------------------------|--------------------|
| Sensor          | Humidity sensor        | Temperature sensor |
| Type            | Macromolecule capacity | Semiconductor      |
| Measuring range | 0 to 100% RH           | -20 to +85°C       |
| Accuracy        | ±2% RH (25°C)          | ±0.3°C             |
| Resolution      | 0.1% RH                | 0.015°C            |
| Interface       | I <sup>2</sup> C       |                    |

#### Notice

In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.