

Model No. HSU-CHU-41A

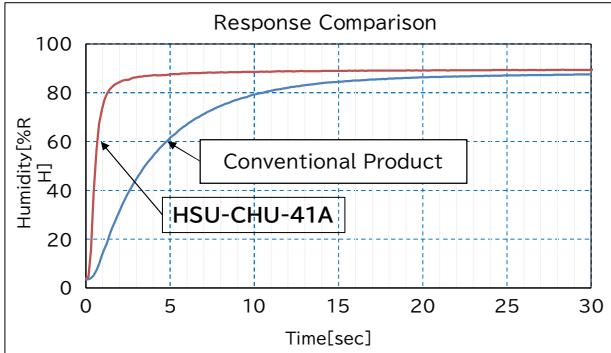
World's
Fastest



■ Features

- Achieves ultra-fast response (τ 63%: 1 second)
- Supports a wide range of operating voltages (1.62 to 5.5V)

Its high-speed response makes it ideal for use in the following fields.



Classification	Application
Air conditioners, refrigerators, etc. General consumer products	Energy-saving measures, etc.
Medical Equipment	CPAP devices (Continuous Positive Airway Pressure) Ventilators
Automotive	Fog detection Energy-saving measures

■ Product Specifications

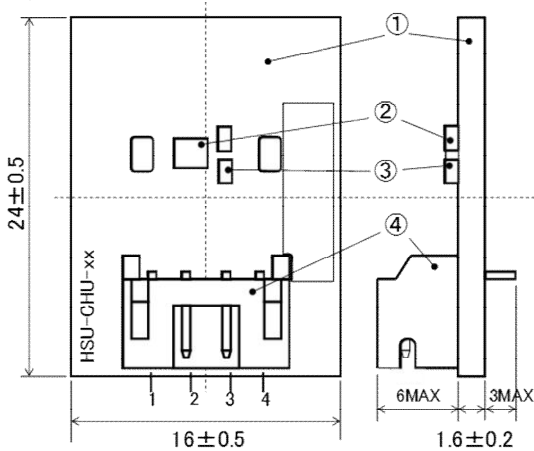
1) Absolute Maximum Rated

Item	Rated	Unit	Remarks
Storage Temperature Range	-25 ~ 105	°C	
Operating Voltage	-0.3 ~ 7.0	V	

2) Rated

Item	Rated	Unit	Remarks	
Operating Voltage	1.62 ~ 5.5	V		
Current Consumption	150 (TYP)	μ A		
Humidity	Measurement Range	0 ~ 100	%RH	
	Resolution	0.1	%RH	10-bit data (I2C output)
	Humidity Accuracy	± 3 (TYP)	%RH	25°C/20 to 80%RH
± 6 (MAX)		%RH	5-45°C/0-100%RH	
Temperature	Measurement Range	-20 ~ 100	°C	
	Resolution	0.1	°C	11-bit data (I2C output)
	Temperature Accuracy	± 0.5 (TYP)	°C	5 ~ 60°C

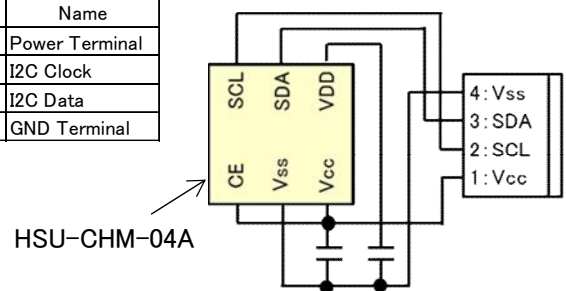
3) Dimensions



Part Number	Name	Specifications
①	Printed Circuit Board	CEM-3, 1.6mm
②	Temperature and Humidity Sensor	Capacitive Humidity Sensor Element HSU-CHM-04A
③	Mounting Components	-
④	Connector	S4B-PH-K-S, JST, 2mm pitch

Pin No.	Terminal Name	Name
1	Vcc	Power Terminal
2	SDA	I2C Clock
3	SCL	I2C Data
4	Vss	GND Terminal

<Circuit Configuration>



Customization is available for board shape, sensor mounting holes, etc.