SHINYEI

Humidity Sensor

Pb free sensor

Model C10-M53R

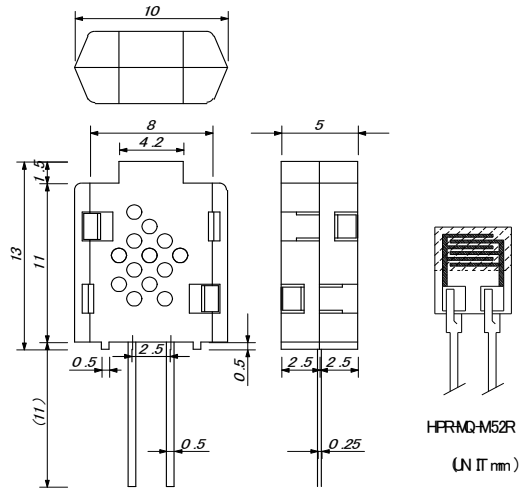
The SHINYEI HUMENT Type HPR-MQ is a humidity device formed by distributing a humidity sensitive macro-molecule onto an electrode substrate. The resistance of the device varies exponentially with variation on Relative Humidity. C10-M53R sensor is Pb (lead) free sensor and environmentally safe.

Feature	Application
Wide humidity operating range	Air-conditioner, Humidifier, Dehumidifier
Outstanding repeatability	Humidity Controller, Humidity Transmitter
Long-term stability	Hygrometer, Hygro-recorder
Low hysteresis	Copying machine
Small and light-weight	Clock, Weather-station
Pb free – good for environment	IAQ Monitor

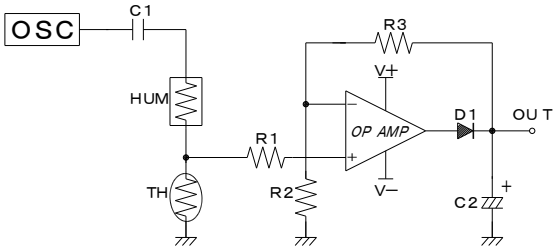
Characteristic

Model	C10-M53R
Humidity Sensor element	Shinyei Humen HPR-MQ-M53R
Rated Voltage	1 Vrms (Max.)
Rated Power	0.2mA (Max.)
Operating Temperature Range	0 to 60°C
Operating Humidity Range	95%rh or less
Standard Humidity Resistance	31k Ohm (at 25°C, 60%rh, 1kHz)
Humidity Measurement Accuracy	+/-5%rh(at 25°C, 60%rh, 1kHz)
Temperature Dependence	0.6%rh/°C
Frequency Dependence	+/-1%rh/°C
Material of Sensor Housing	White
Dimension	10.0 x 25.5 x 5.0 mm

Confiauration (Demensions in mm)



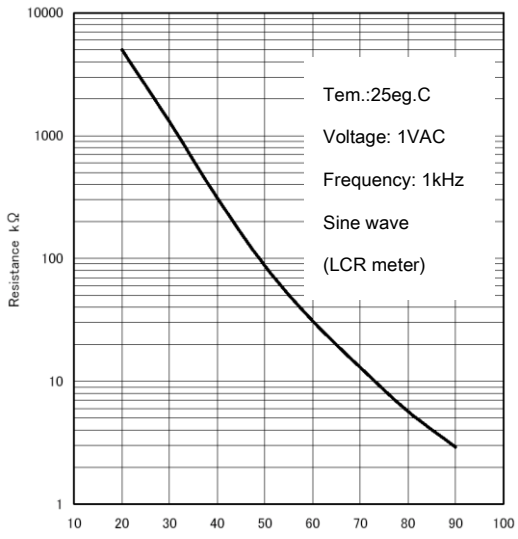
Sample Application



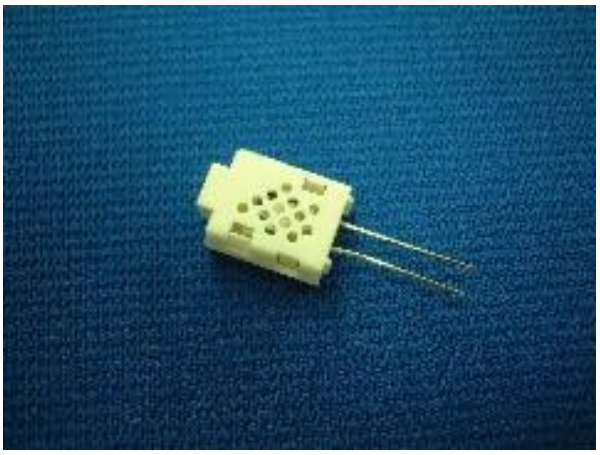
HUM : High polymer humidity sensor
OSC : Oscillation Circuit
AMP : Operation Amp
TH : Thermistor
OUT : Output

Normal Characteristics

CL-M53R



Relative Humidity %rh



Remark: We have the right to revise specifications and product configurations without notice.

Caution for use

! Avoid inputting DC voltage directly to Humidity Sensor.
! Avoid condensation and drenching.
! Avoid application of the Humidity Sensor in the salt, inorganic gases and organic gases.

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