



Humidity Sensor

Pb free sensor

Model C10-M52R

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-M52R sensor is Pb (lead) free sensor and environmentally safe.

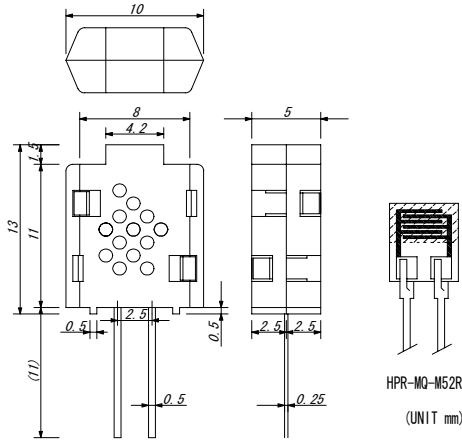
| Feature | Application |
|--------------------------------|---|
| Wide humidity operating range | Air-conditioner, Humidifier, Dehumidifier |
| Outstanding repeatability | Humidity Controller, Humidity Transmitter |
| Long-term stability | Hygrometer, Hygro-recorder |
| Low hysteresis | Copying machine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

Characteristics

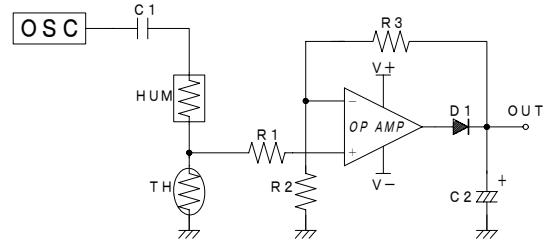
| Model | C10-M52R |
|-------------------------------|---|
| Humidity Sensor element | Shinyei Hument HPR-MQ-M52R |
| Rated Voltage | 5 VAC (Max.) |
| Rated Power | 5mW. AC (Max.) |
| Operating Temperature Range | -20 to 60deg. C |
| Operating Humidity Range | 95%rh or less |
| Standard Humidity Resistance | 31k Ohm (at 25deg. C, 60%rh, 1kHz) |
| Humidity Measurement Accuracy | +/-5%rh(at 25deg. C, 60%rh, 1kHz) +/-3.5%rh(at 25deg. C, 60%rh, 1kHz) is available |
| Temperature Dependence | 0.6%rh/deg. C |
| Frequency Dependence | +/-1%rh/deg. C |
| Material of Sensor Housing | White |
| Dimension | 10.0 x 25.5 x 5.0 mm |

Specification sheet of C10-M52R Literature (Page 2 of 2)

Configuration (Dimensions in mm)

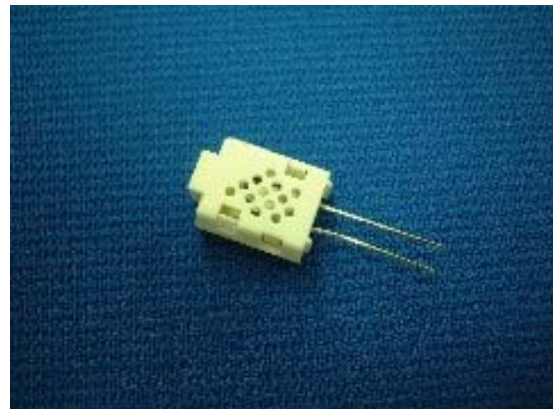
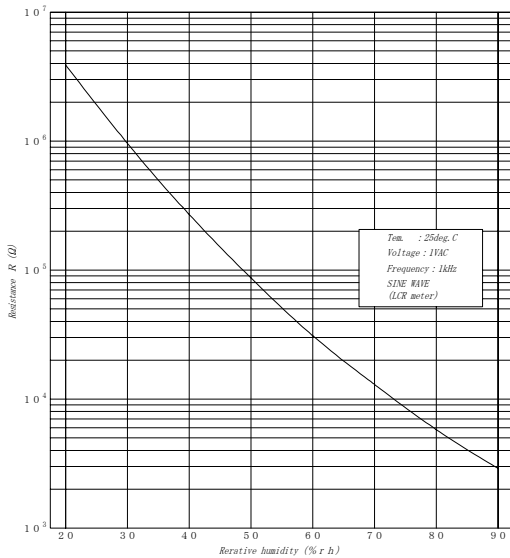


Sample Application



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

Nominal Characteristics



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

Caution for use



- ! Avoid to input 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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