



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



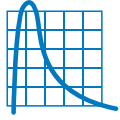
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

HS12SP

Thermometrics Relative Humidity Sensor



Thermometrics HS12SP model is a non-refresh type of polymer based relative humidity sensor.

Features

- Good, long-term reliability
- Cost-effective performance
- Quick response

Applications

- Humidity Monitors
- Humidity Controllers
- Air Conditioners
- Humidifiers
- Dehumidifiers
- Automatic Ventilation

Amphenol
Advanced Sensors

Specifications

Storage Temperature Range

0~50 °C

Storage Humidity Range

20~90 %RH, Without condensation

Operating Humidity Range

30~90 %RH

Operating Temperature Range

0~50°C

Rated Working Voltage

AC 1 V (50Hz~1KHz)

Rated Power

0.3 mW

Nominal Impedance Value

60 k Ω (25°C, 50%RH)

Tolerance on Impedance Value

60 \pm 30 k Ω

Reliability (Impedance value change as relative humidity at 25°C, 50%RH)

Dry Heat Storage

< \pm 5 %RH (85°C, 1000 hr.)

Cold Storage

< \pm 5 %RH (-40°C, 1000 hr.)

Damp Heat Storage

< \pm 5 %RH (40°C, 90 %RH, 1000 hr.)

Low Humidity Storage

< \pm 5 %RH (25°C 20 %RH, 1000 hr.)

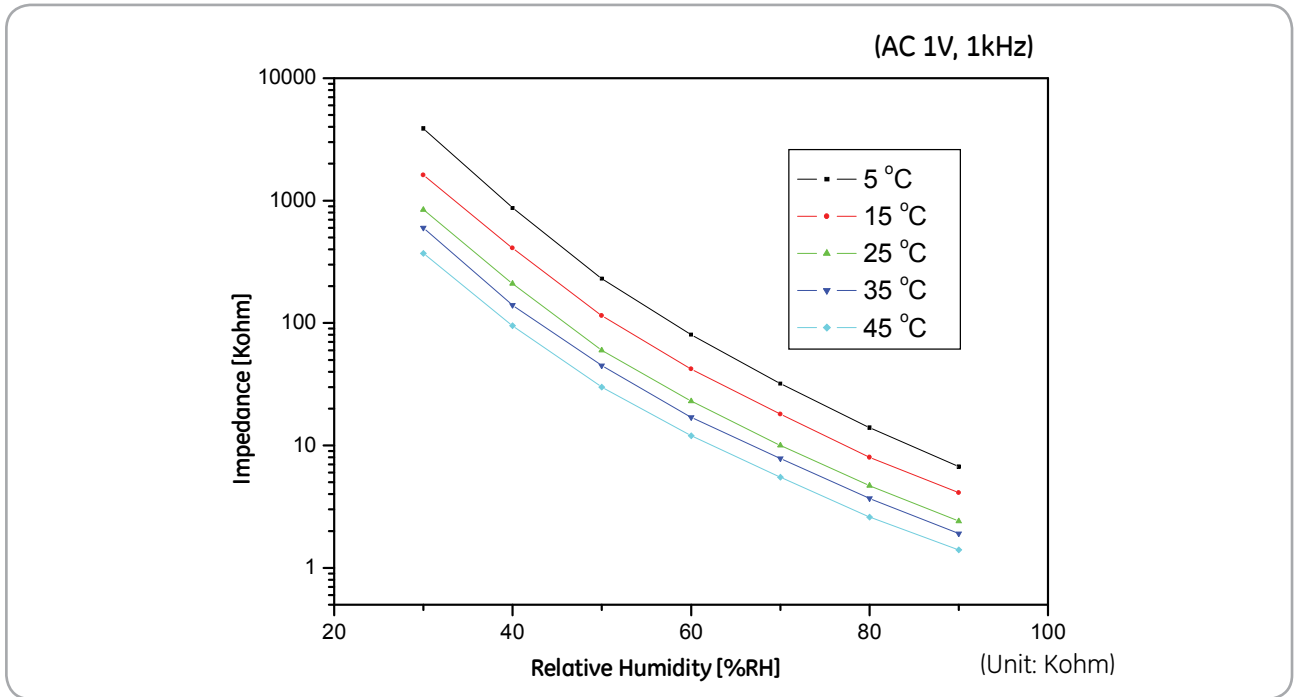
Heat Cycle Test

< \pm 5 %RH (-40°C ~ +85 °C, 100 cycles)

Notes

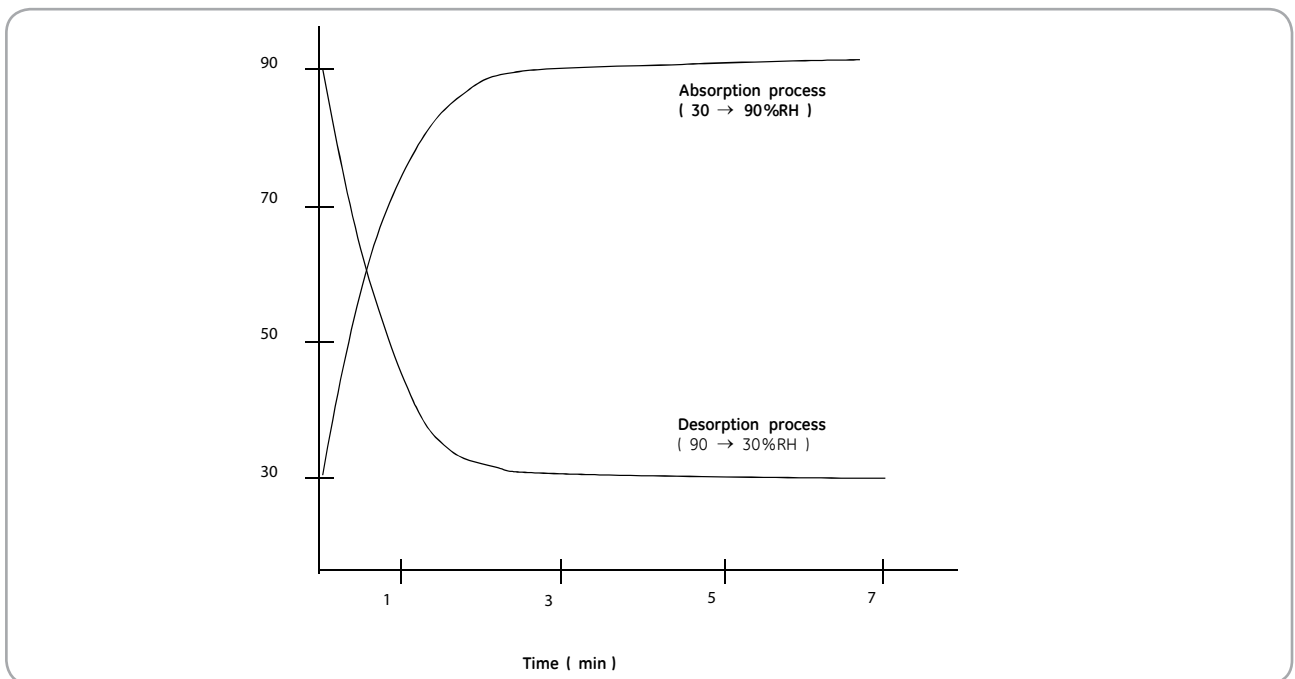
1. Don't apply any direct current to the sensor.
2. Don't touch the film and the surface of the sensor.
3. In use and stock, freezing, dust, mist, oil, alcohol, corrosive gases or any other dirty/anomalous ambient may cause degradation of the sensor's characteristics.
4. Protect the sensor film from flux/fume and high temperature during the soldering.
5. Don't put sensor in water.

Typical Humidity Curve

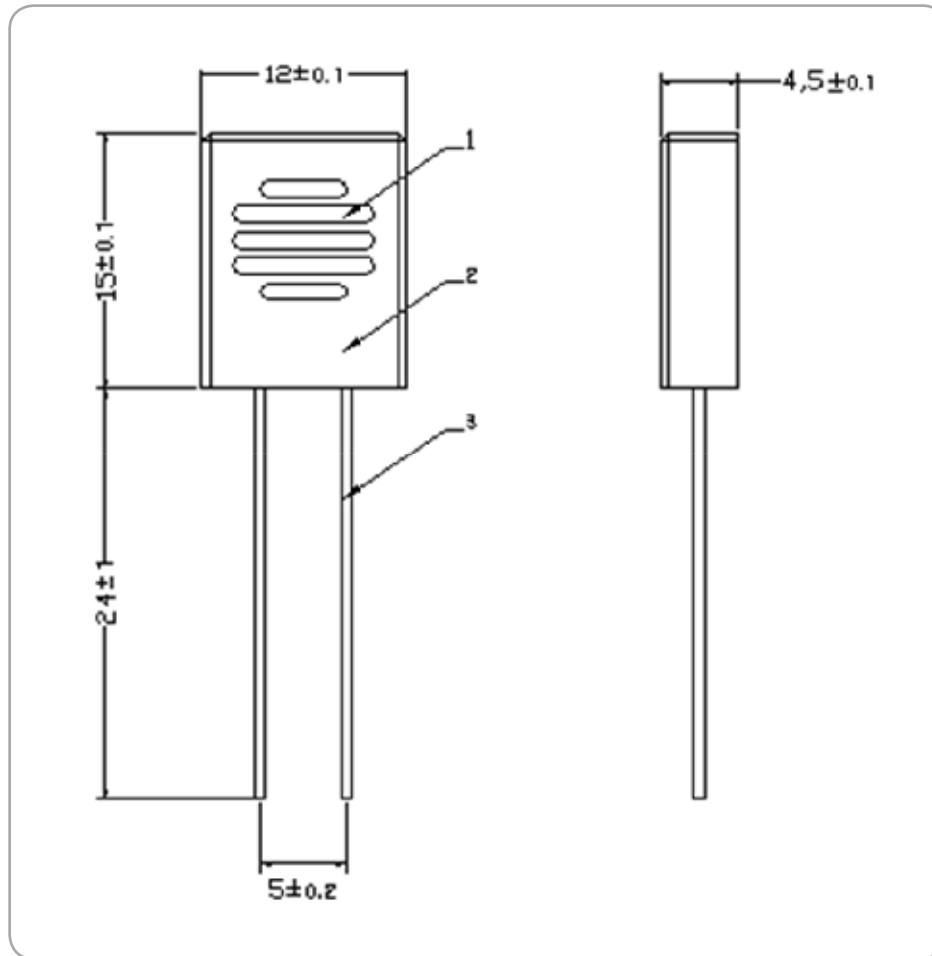


°C	Relative Humidity (%RH)						
	30	40	50	60	70	80	90
5	3900	870	230	80	32	14	6.7
15	1610	410	115	42	18	8.0	4.1
25	840	210	60	23	10	4.7	2.4
35	600	140	45	17	7.8	3.7	1.9
45	370	95	30	12	5.5	2.6	1.4

Typical Response Characteristics



Dimension Drawings (unit:mm)



No	Part Name	Material
1	Filter	
2	Case	ABS (Color: Deep Blue)
3	Lead Wire	Sn Plated Cu wire, 0.6 mm (Cu: Sn = 99.97: 0.03)