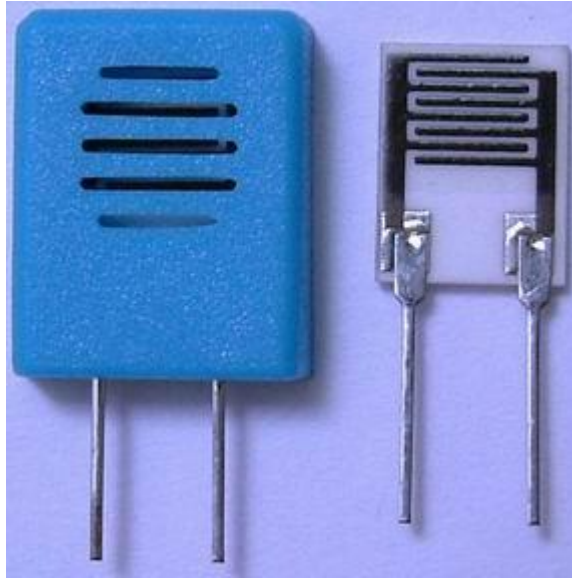


# Resistive humidity sensor, Model: HR202



1. HR202 is a new kind of humidity-sensitive resistor made from organic macromolecule materials, it can be used in occasions like: hospitals, storage, workshop, textile industry, tobaccos, pharmaceutical field, meteorology, etc.

## 2. Features:

Excellent linearity, low power consumption, wide measurement range, quick response, anti-pollution, high stability, high performance-price ratio.

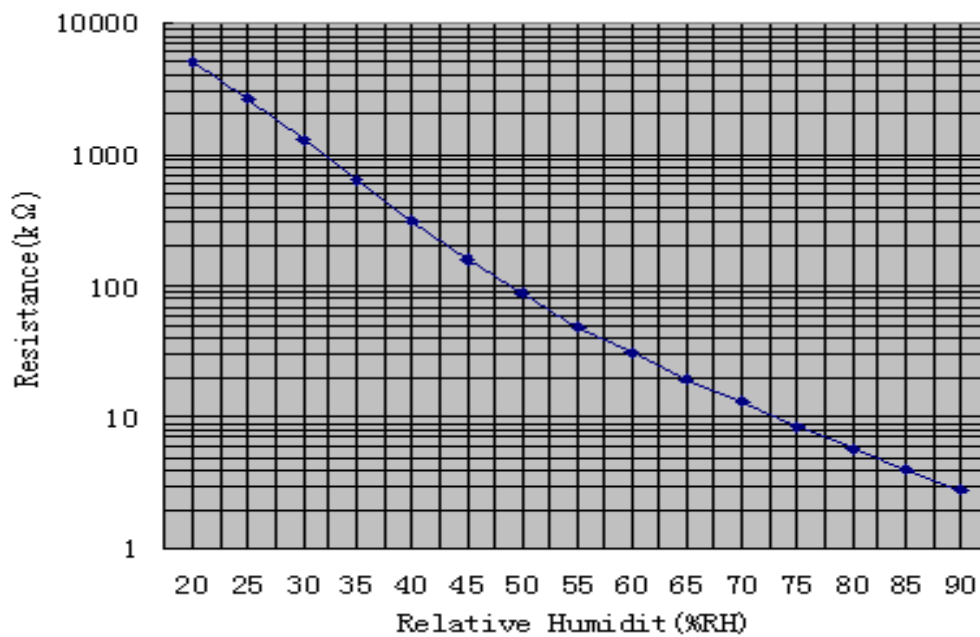
## 3. Technical Specification:

Operating range:	humidity(20-95%RH) temperature(0-60Celsius)
Power supply:	1.5V AC(Max sine)
Operating frequency:	500Hz-2kHz
Rated power:	0.2mW(Max sine)
Central value:	31k $\Omega$ (at 25Celsius, 1kHz ,1V AC, 60%RH)
Impedance range:	19.8-50.2k $\Omega$ (at 25Celsius, 1kHz ,1V AC, 60%RH)
Accuracy:	+/-5%RH
Hysteresis:	+/-1%RH
Long-term stability:	+/-1%RH/year
Response time:	<10s
Dimensions:	with case 12*15*5mm, without case 8*10*0.7mm

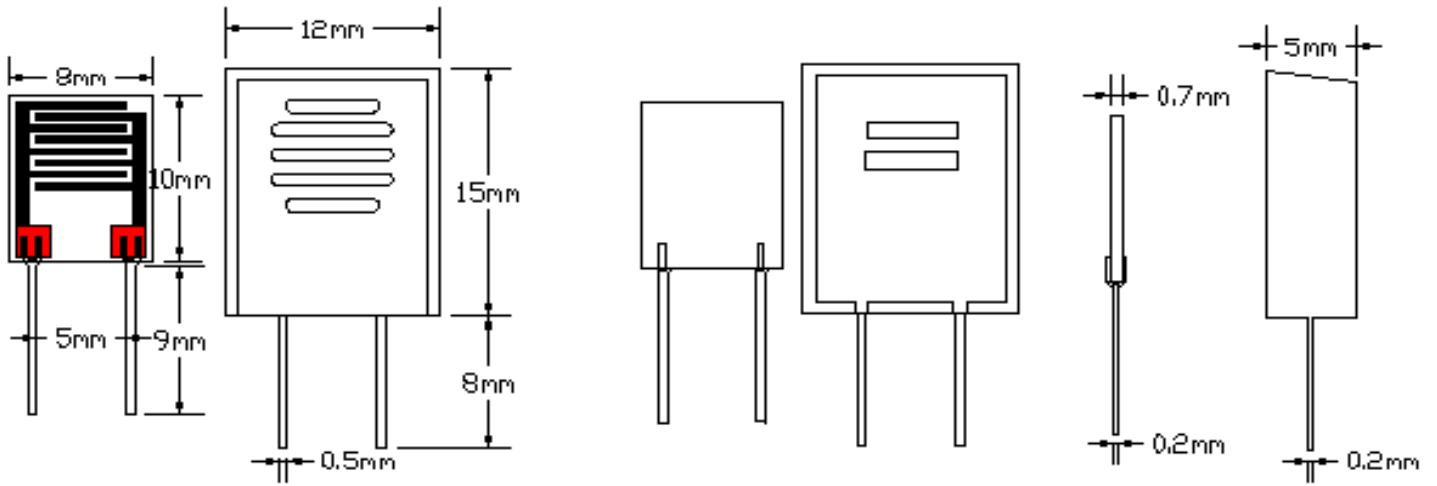
## 4. Performance parameter(at 1KHz) Unit: ohm

	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
20%RH				10M	6.7M	5.0M	3.9M	3.0M	2.4M	1.75M	1.45M	1.15M	970K
25%RH		10M	7.0M	5.0M	3.4M	2.6M	1.9M	1.5M	1.1M	880K	700K	560K	450K
30%RH	6.4M	4.6M	3.2M	2.3M	1.75M	1.3M	970K	740K	570K	420K	340K	270K	215K
35%RH	2.9M	2.1M	1.5M	1.1M	850K	630K	460K	380K	280K	210K	170K	130K	150K
40%RH	1.4M	1.0M	750K	540K	420K	310K	235K	190K	140K	110K	88K	70K	57K
45%RH	700K	500K	380K	280K	210K	160K	125K	100K	78K	64K	50K	41K	34K
50%RH	370K	26K	200K	150K	115K	87K	69K	56K	45K	38K	31K	25K	21K
55%RH	190K	140K	110K	84K	64K	49K	39K	33K	27K	24K	19.5K	17K	14K
60%RH	105K	80K	62K	50K	39K	31K	25K	20K	17.5K	15K	13K	11K	9.4K
65%RH	62K	48K	37K	30K	24K	19.5K	16K	13K	11.5K	10K	8.6K	7.6K	6.8K
70%RH	38K	30K	24K	19K	15.5K	13K	10.5K	9.0K	8.0K	7.0K	6.0K	5.4K	4.8K
75%RH	23K	18K	15K	12K	10K	8.4K	7.2K	6.2K	5.6K	4.9K	4.2K	3.8K	3.4K
80%RH	15.5K	12.0K	10.0K	8.0K	7.0K	5.7K	5.0K	4.3K	3.9K	3.4K	3.0K	2.7K	2.5K
85%RH	10.5K	8.2K	6.8K	5.5K	4.8K	4.0K	3.5K	3.1K	2.8K	2.4K	2.1K	1.9K	1.8K
90%RH	7.1K	5.3K	4.7K	4.0K	3.3K	2.8K	2.5K	2.2K	2.0K	1.8K	1.55K	1.4K	1.3K

### 5.Impedance performance (at25°C 1V AC 1kHz)



### 6.Dimensions



### Cautions:

- (1) Avoid polarization, driving voltage or current should be 100% alternative.
- (2) Please measure the sensor with LCR alternative-current bridge, don't use multimeter.
- (3) Avoid dew condensation.
- (4) Recommended storage conditions: temperature 0-60Celsius; humidity <80%RH