

INTRODUCTION

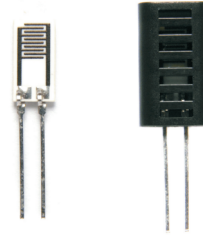
The HCZ-H6 humidity sensor is a discreet device that can be installed in a wide variety of applications.

APPLICATIONS

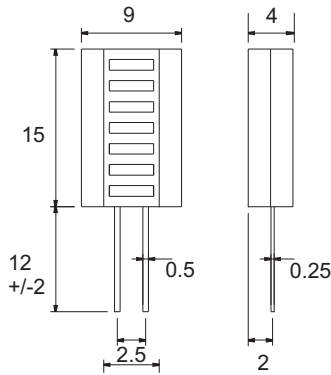
- Airconditioner, Humidifier, Dehumidifier
- Humidity Controller, Humidity transmitter
- Hygrometer, Hygro-recorder
- Copy machines, Data Equipment
- Appliance
- Weather forecast Equipment

FEATURES

- Wide humidity range
- Linear output
- Long term stability
- Small and economical
- RoHS Compliant



DIMENSIONS



PART Number

- | | | |
|-----------------|----------|--|
| <u>HCZ - H6</u> | <u>A</u> | 1. Series |
| 1 | 2 | 2. Dip type +/- 3%RH |
| | 3 | 3. A= Molded Body
B= Open Frame (unprotected) element |

ELECTRICAL CHARACTERISTICS

	UNITS	MIN.	TYP.	MAX.
Rated Voltage	Vrms	-	1	-
Rated power	mW	-	-	0.2
Operating frequency range	KHz	0.5	1	2
Operating temperature range	°C	0	-	60
Operating humidity range	%RH	-	-	90
Impedance range at 60%RH and 25°C**	KΩ	22.9	-	41.9
Humidity accuracy	%RH	-3	-	+3
Hysteresis (40%RH~80%RH)	%RH	-	-	2
Temperature dependence (reference)	%RH/°C	-	0.6	-

**Measurement by LCR meter at 1KHz, 1 Vrms (sine wave)

Relative humidity (Impedance at 25°C, 1KHz, 1Vrms)

%RH	20	30	40	50	60	70	80	90
Impedance (KΩ)	6,300	1,400	310	87	31	12	5.4	2.3

MECHANICAL CHARACTERISTICS

Number	Item	Description	Criteria*
1	Shock Resistance	Drop 3 times @75cm	No abnormal appearance & electrical properties
2	Vibration Resistance	2 hours each in the directions of X-Y-Z, at the frequency of 10-55Hz, and amplitude of 1.5mm	No abnormal appearance & electrical properties
3	Resistance to soldering heat	The lead terminal shall be immersed by 3mm from the substrate for 3 seconds in solder bath of 260±5°C	No abnormal appearance & electrical properties
4	Strength of terminations	500g @ 10 seconds in the axial direction of lead terminal	Secured

RELIABILITY

Number	Item	Description	Criteria*
1	Heat Resistance	1000 Hours @ 85°C, <30%RH	<±3%RH
2	Cool Resistance	1000 Hours @ -30°C, <70%RH	<±3%RH
3	Humidity Resistance	1000 Hours @ 40°C, 90%RH	<±3%RH
4	Humidity Cycle	Repeat 500 Cycles One Cycle: 30 minutes @ 25°C, <30%RH 30 minutes @ 25°C, > 90%RH	<±3%RH
5	Temperature Cycle	Repeat 100 Cycles One Cycle: 30 minutes @ -30°C 30 minutes @ 85°C	<±3%RH
6	Voltage Resistance	3000 Hours @ 1KHz, 1Vrms	<±3%RH

*The criteria test that the sensors finish the description process after 2 hours under normal temperature and humidity. The test condition is fixed at 25°C, 60%RH by LCR meter at 1KHz, 1Vrms (sine wave)

CAUTION NOTES

- Avoid direct application of DC Voltage on Sensor
- Avoid drenching
- Avoid exposure to Salt, Sulfide Dioxide, Ammonia, Chlorine, Alcohol, Glycols, Aldehydes

RH CURVE

