HUMIDITY

FLOW

TEMPERATURE

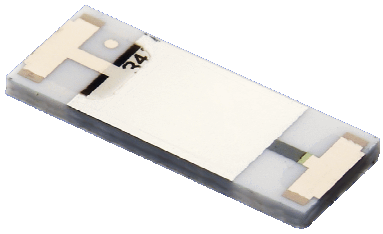
MK33 SMD
Capacitive Humidity Sensor

Product

The MK33 SMD was developed out of the MK33, creating a technical product out of a vision just using special production know how. With a base capacitance of 180pF and a wide humidity/temperature operation window, the MK33 SMD gives cost effective answers to many tasks of modern test and measurement applications.
With their well known environmental resistance, IST humidity sensors in their proven SMD version fulfill these requirements with outmost performance. Thanks to their large sensor area, these sensors deliver a superior signal to noise ratio and excel with extreme low long-term drift rates. In combination with external signal conditiong electronics, they deliver an optimal cost to performance ratio to our customers.

Advantages

- Fast response time
- Hot water resistance
- Excellent hysteresis
- Mechanical robust
- Good linearity
- Wide operating range
- Excellent resistance against solvents



Technical Data

Sensor Type:	MK33 SMD
Measurement principle:	Capacitive Polymer Humidity Sensor
Mechanical dimensions:	W=2,54 x L=6,35 x D=0,38 mm
Humidity Operating Range:	0 ... 100% RH (max. DP = 95 deg C)
Operating temperature range:	-50 ... +150 deg C
Base Capacitance	180 pF ± 50 pF (@ 23 deg C and 30% RH)
Sensitivity:	0,27 pF / %RH (15 ... 90% RH)
Loss Factor:	< 0,01 (@ 23 deg C and 30% RH)
Accuracy:	< 2% RH (20 ... 90% RH @ 23 deg C, after one point calibration)
Hysteresis:	< 2% RH
Recovery Time:	< 6 s(50% RH → 0% RH; V_{air} = 2 m/s., **response time** < 4 s typ.)
Frequency Range:	1 ... 100 KHz
Maximum Operating Voltage:	< 12 Vpp AC
Signal Form:	alternating signal without DC bias
Contacts	SMD, backend compatible

INNOVATIVE SENSOR TECHNOLOGY

ISO 9001

IST AG, Industriestrasse 2, CH-9630 Wattwil, Switzerland, Phone (+)41 71 987 73 73, Fax (+)41 71 987 73 77
e-mail info@ist-ag.com, www.ist-ag.com

V1.0-03/2006