DATA SHEET

Capacitve humidity sensor
KFS140-D

Description

Characteristic features

- Economic model
- Mechanically robust
- Good Linearity
- Dew resistant
- Alcohol resistant
- Low Hysteresis
- Temperature shock resistant
- Compact size
- RoHS conform

Areas of application

- HVAC (Heating, Ventilation and Air conditioning)
- Climate monitoring
- Ecological studies and ecological measurement systems
- Meteorology

Technical Data

Capacitive Humidity Sensor KFS140-D	
Measuring principle	Capacitive polymer humidity sensor
Humidity range	0 ... 100 % relative humidity
max. Dew point	+85 °C
Temperature range	-50 ... +150 °C
Capacitance	150 pF ± 50 pF (at 23 °C and 30 % RH)
Rate of rise	0.25 pF / % RH
Tan	< 0.01
Hysteresis	< 1.5 % RH
Response time T_{63}	< 5 s
Frequence range	1 ... 100 kHz
max. evaluation voltage	< 12 Vpp ~
Signal waveform	AC voltage (without DC-component)
Dimensions	3.81 x 5.0 x 0.4 mm
Connection	PTFE isolated wires Ø 0.4 x 18 mm, RM 2.54 mm
Order No.	KFS140-D

Features

The KFS 140-D is a capacitive humidity sensor with very good performance data. Other highlighting features are its wide range of applications, low hysteresis and linear characteristics. The high performance polymer used in the sensor is resistant against dew formation and many chemical effects and also guarantees an outstanding long-term stability.
The sensor has a favourable price performance ratio and is also suitable for applications in the field of ventilation and air-conditioning systems. Due to its optimum performance, the sensor is also ideally suitable for meticulous jobs in industrial measuring systems.

Technical changes reserved

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