DATA SHEET

Capacitive humidity sensor KFS140-FA

Description

Characteristic features

- Extremely fast response time
- Very low application temperature up to –80 °C
- Temperature shock resistant
- Good linearity
- Low Hysteresis
- Dew resistant
- Compact size
- Mechanically robust

Areas of application

- Meteorology
- Radio probes
- Medical systems
- Research and science

Technische Daten	
Measuring principle	Capacitive polymer humidity sensor
Humidity measuring range	0...100 % RH relative humidity (max. TP = +80 °C)
Operating temperature range	-60...+150 °C
Capacitance	140 pF ±40 pF (at 23 °C and 30 % RH)
Rate of rise	0,25 pF / % RH (15...90 % RH)
Loss factor	< 0,01
Hysteresis	< 1,5 % RH
Response time	<1 sec. nominal
Frequency 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 Cu/Ag-wires Ø 0.4 x 19.5, RM 2.54 mm RoHS-conform
Ordering No.	KFS140-FA

Features

The KFS140-FA humidity sensor has been developed as a custom made solution for application in radio probes and weather balloons. In these applications, the humidity sensor has to prove its quality not only under normal ambient conditions, but also in extremely low temperatures with high radiation exposure and dew formation.

Due to very good performance data and extremely fast response time, the sensor is also ideally suitable for applications in medical systems or in research and science.

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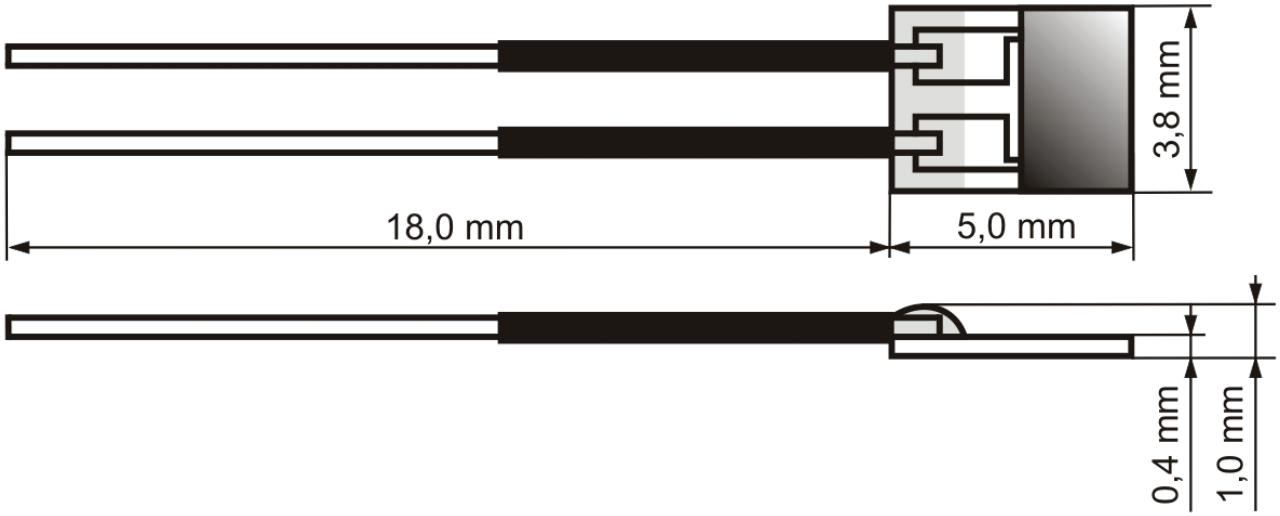

For further information, visit our website:
www.bb-sensors.com

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