

Micro-Module DKRF4001 humidity&temperature *for OEM - Applications*

The micro-module DKRF4001 has been designed specially for OEM-applications. The module has two calibrated, linear voltage-outputs with 0..1 / 0..5 / 0..10 VDC.

The sensor modul can be used for measurements between 0...95% RH (not condensing) and temperatures between -20...+80°C.

Optional filtercap

The modul can also be used for applications in harsh environmental conditions.

The optional Filtercap SF1 protects the sensor from dust and water drops, so the sensor head will even work at humidities up to 100%.



Specification

Humidity

Calibrated

Range: 0...100% RH

Accuracy: +/- 3.5% RH Standard (20...80% RH)
(outside, see the diagramm)
(+/-2%RH@25°C only DKRF4001-P)

Resolution of

D/A-convention: 0.025% RH

Temperature

Range: -20...+80°C

Accuracy: +/-0.7°C @25°C Standard
+/-0.5°C @25°C only DKRF4001-P

Resolution of

D/A-convention: 0.04°C

Optional output

parameters: Dewpoint, absolute humidity, mixing ratio

Analog output: 0...1V / 0...5V / 0...10V (=0...100%)
(=-20...+80°C)

Supply, current consumption:

Output: 0..1V 3... 25VDC, 3 mA

Output: 0..5V 6... 25VDC, 3.5 mA

Output: 0..10V 11...25VDC, 4 mA

Dimensions:

50mm x 11mm x H
H= 8.2mm with filter cap
H= 4 mm w/o filtercap

Connections

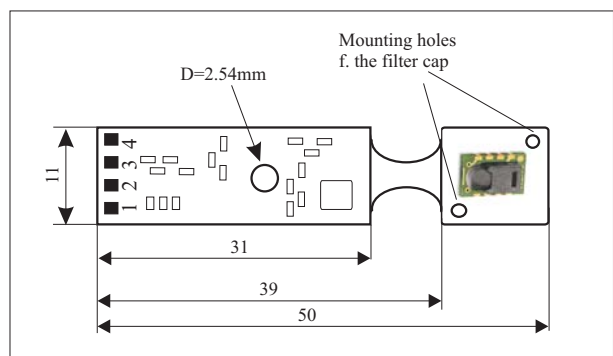
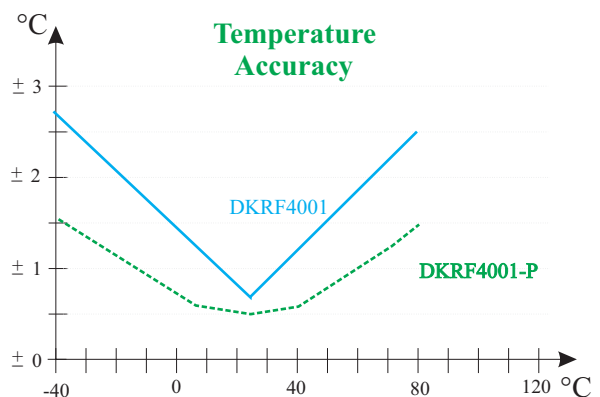
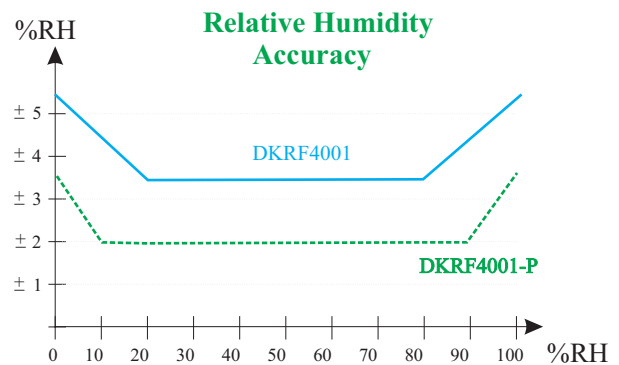
Pin 4: GND

Pin 3: +U_B

Pin 2: Rhout

Pin 1: Tout

4 pin connection , pattern 1.27mm



DKRF4001-e .03/06

Specification may change without notice