

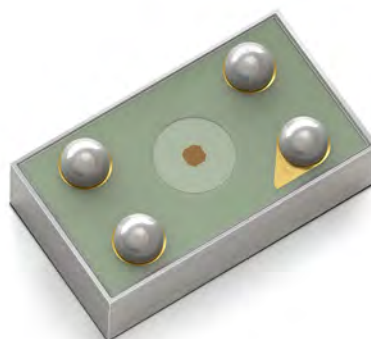
Simplicity Meets Proven Performance

Highest Performance at Smallest Power Budgets

1.8 V Digital Humidity Sensor SHTW2

- Chip-scale package: 1.3x0.7x0.5 mm³
- I²C interface
- Fully calibrated and linearized output

Humidity Sensor SHTW2 Specifications



RELATIVE HUMIDITY

Parameter	Conditions	Value	Units
Accuracy tolerance	Typ.	± 3.0	% RH
Specified range	-	0 to 100	% RH
Response time	τ 63%	8	s
Long-term drift	Typ.	< 0.25	% RH/y

TEMPERATURE

Parameter	Conditions	Value	Units
Accuracy tolerance	Typ.	± 0.4	$^{\circ}\text{C}$
Specified range	-	-30 to $+100$	$^{\circ}\text{C}$
Response time	τ 63%	< 5 to 30	s
Long-term drift	Typ.	< 0.02	$^{\circ}\text{C}/\text{y}$

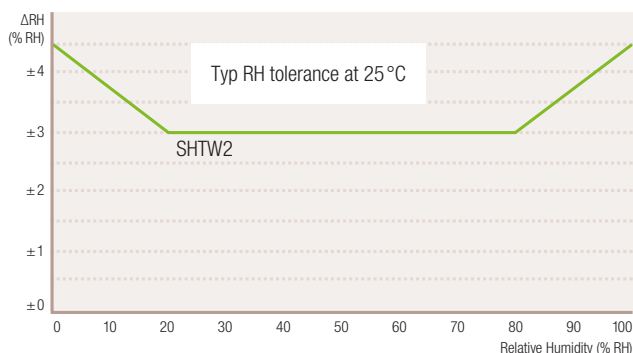


Figure 1: Typical and maximal tolerance for the relative humidity in % RH at 25°C.

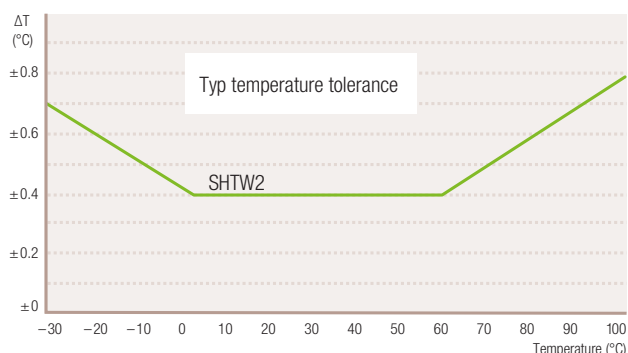


Figure 2: Typical and maximal tolerance for the temperature sensor in $^{\circ}\text{C}$.

ELECTRICAL CHARACTERISTICS

Default conditions of 25 $^{\circ}\text{C}$ and 1.8 V supply voltage apply to values in the table below, unless otherwise stated.

Parameter	Conditions	Typ.	Units	Comments
Supply voltage	-	1.8	V	-
Current consumption	Idle state	0.7	μA	-
	Average	4.8	μA	Avg. @ 1 meas./sec.
Power consumption	Average	8.6	μW	Avg. @ 1 meas./sec.

ORDERING INFORMATION

The SHTW2 can be ordered in tape and reel packaging with different reel sizes.

Quantity	Packaging	Order Number
1'000	Tape & Reel	1-101484-01
10'000	Tape & Reel	1-101380-01