



P14 202

Capacitive Humidity sensor

Product

Despite its very small size, the P14 202 has strong performance characteristics and is particularly beneficial in areas such as white goods. In combination with external electronics, it offers an excellent cost to performance ratio. Currently it is the smallest capacitive humidity sensor in the world.

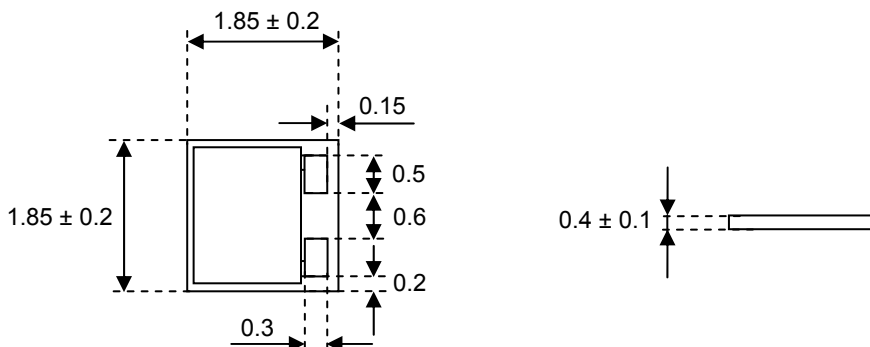
Advantages

- Fully automated assembling
- Designed for bonding
- Applicable in white goods, mobile phones
- Wide temperature range
- RoHs compliant

Technical Data*

Sensor Type:	P14 202
Measurement Principle:	Capacitive Polymer Humidity Sensor
Mechanical Dimensions:	W=1.85 x L=1.85 x H=0.4 mm
Humidity Operating Range:	0 ... 100% RH (max. dewpoint temperature = 80°C)
Operating Temperature Range:	-50 ... +150°C
Base Capacitance (at 23° C and 30% RH):	30 pF ± 10 pF
Sensitivity (C = 30 pF):	0.05 pF / %RH
Nonlinearity:	< ±1.5% RH (15 ... 90% RH at 23°C, after one point calibration)
Hysteresis: 1h, 20% RH at 23°C	< ±1.5% RH
→ 1h, 85% RH at 70°C	
→ 1h, 20% RH at 23°C	
Response Time T ₆₃ :	< 6 s (50% → 0% RH) at 23°C
Frequency Range:	1 ... 100 KHz (recommend 10 KHz)
Maximum Operating Voltage:	< 12 V _{pp} AC
Signal Form:	alternating signal without DC bias
Contacts	solderable, bonding

Construction Size



*These specifications are subject to change and only values for the orientation.

All mechanical dimensions are valid at 25°C ambient temperature, if not differently indicated. ■ All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics. ■ Technical changes without previous announcement as well as mistakes reserve. ■ The information on this data sheet was examined carefully and will be accepted as correct. No liability in case of mistakes. ■ Load with extreme values during a longer period can affect the reliability. All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. Typing errors and mistakes reserved. Product specifications are subject to change without notice.



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