
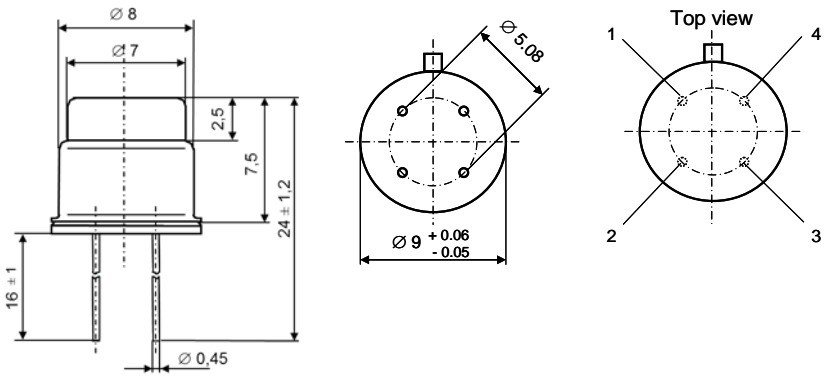
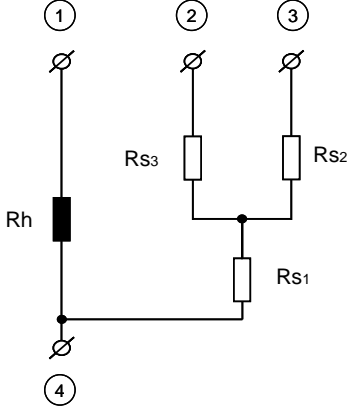
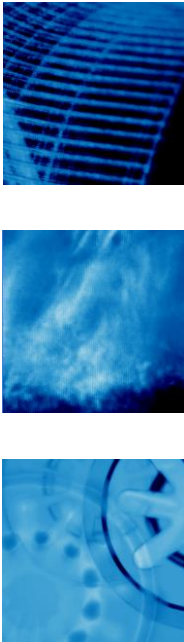


## Technical data

<b>Gas sensor</b>		UST Triplesensor <sup>®</sup> gas sensor element	 <p>Figure 1: Gas sensor element with 2T-cap – similar to figure</p>
<b>Type of sensor</b>	<b>3A4P:</b>	UST Triplesensor <sup>®</sup> gas sensor element with the following gas sensitive layers: <ul style="list-style-type: none"> <li>• 2000C2+: detection of easily oxidable gases CO, ...;</li> <li>• 3000C2+: detection of heavily oxidable gases CH<sub>4</sub>, C<sub>3</sub>H<sub>8</sub>, ...;</li> <li>• 5000C2+: detection of reducible gases NO<sub>2</sub>, O<sub>3</sub></li> </ul>	
<b>Chip</b>		Size = (B x L: 2.0 x 2.3) mm <sup>2</sup>	
<b>Heater resistance at 0 °C</b>	<b>10</b>	R <sub>H0</sub> = (10.0 ± 0.5) Ω	
<b>Housing</b>	<b>2T:</b>	Sensor in a 4-Pin-TO39-housing with a stainless steel cap (2T) - delivery form	
<b>Dimensions</b>			
<b>Pin assignment</b>			R <sub>S1...3...</sub> resistance sensitive layers R <sub>H...</sub> heater resistance
<b>Operating parameters</b>	Heater temperature T <sub>H</sub> = (320 ± 15) °C Power rate P <sub>H</sub> ≈ 450mW		
	R <sub>S1</sub> = (50... 3500) kΩ (gas sensitive layer 2000C2+), R <sub>S2</sub> = (30... 3000) kΩ (gas sensitive layer 5000C2+), R <sub>S3</sub> = (30... 3500) kΩ (gas sensitive layer 3000C2+)		



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## Technical data

Typical sensor characteristics to selected test gases

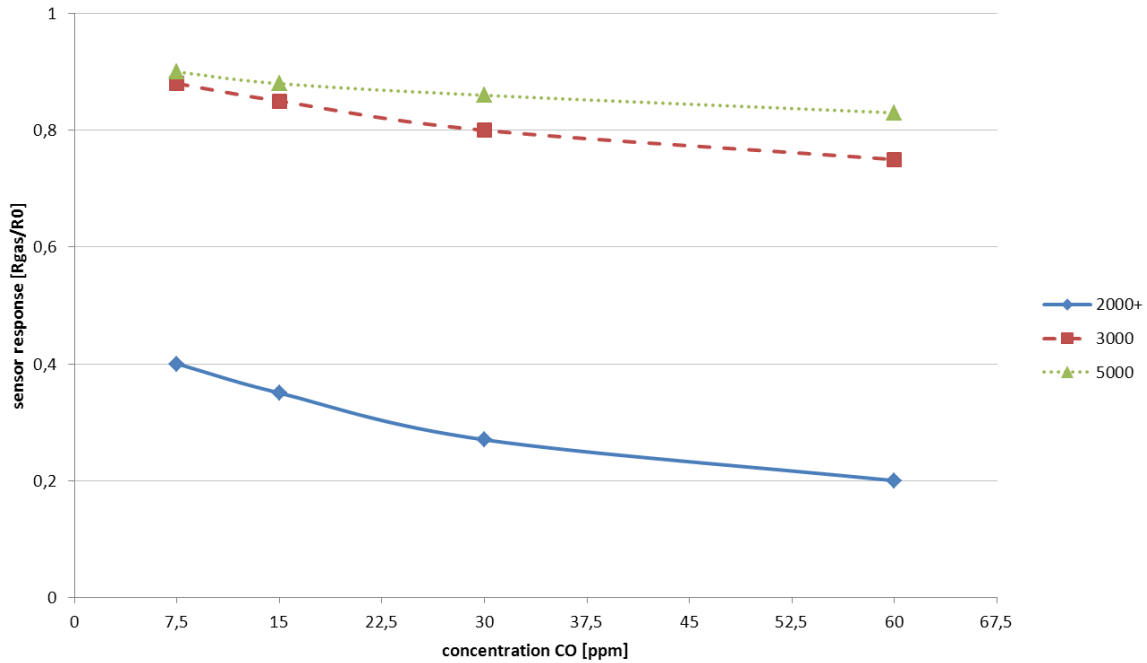


Figure 2: Typical sensor response of the 3 sensitive layers of the 3A4P-Gas sensor element on exposure to CO ( $T_H=320\text{ °C}$ )

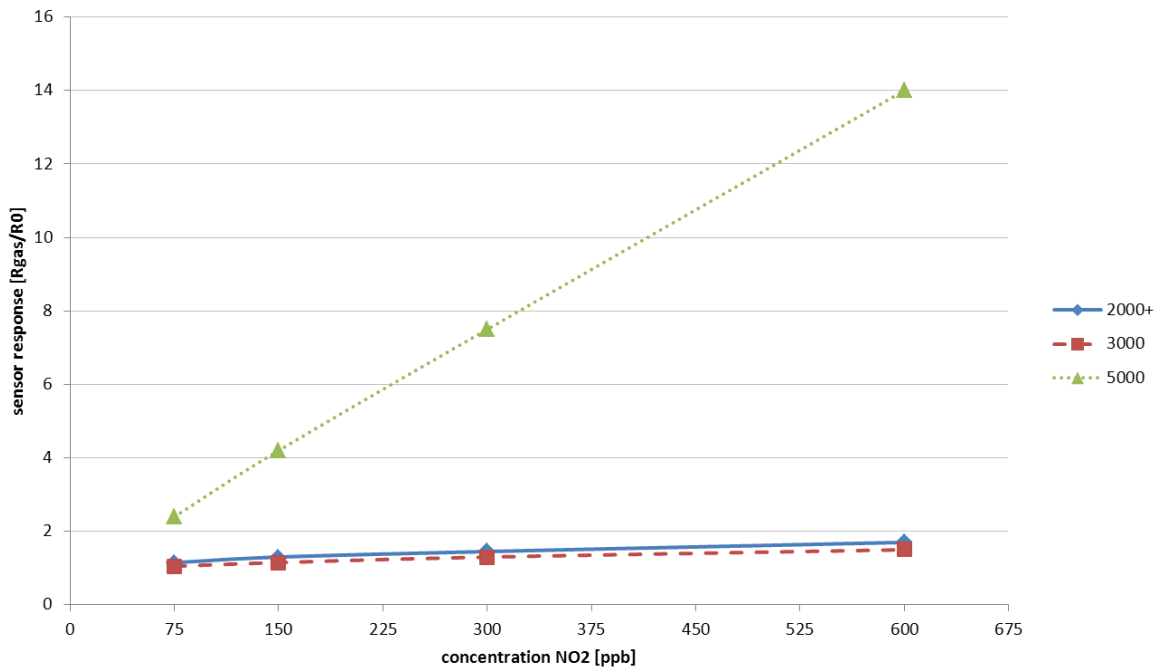
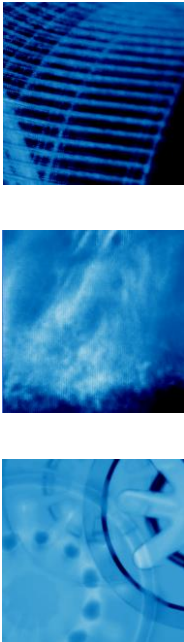


Figure 3: Typical sensor response of the 3 sensitive layers of the 3A4P-Gas sensor element on exposure to NO<sub>2</sub> ( $T_H=320\text{ °C}$ )



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## Technical data

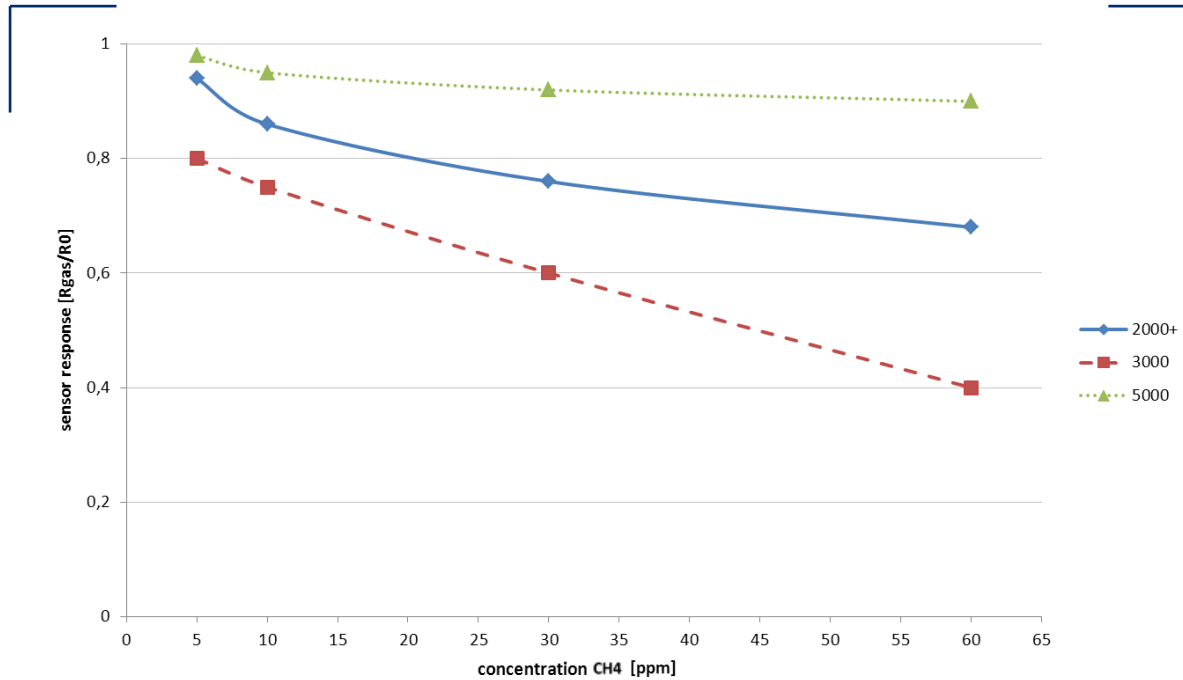


Figure 4: Typical sensor response of the 3 sensitive layers of the 3A4P-Gas sensor element on exposure to CH<sub>4</sub> (T<sub>H</sub>=420 °C)

<b>Allowable storage and transportation temperature</b>	-25 °C ... +70 °C
<b>Allowable storage and transportation humidity</b>	20 % ... 80 % relative humidity
<b>Allowable storage conditions</b>	Storage environment free of any contaminations, particularly protected against chemical substances, such as Silicone etc.
<b>Net weight</b>	ca. 0,35 g
<b>Conformity</b>	2011/65/EU: Restriction of the use of Hazardous Substances Directive (RoHS)

### Important remarks:

Improper transport, storage and application may cause damaging the gas sensor. Silicone containing, sulphurous substances or non-desorbing an-organic contaminations may cause damaging the sensor or changes in the sensor resistance and/or changes in the sensor characteristics.

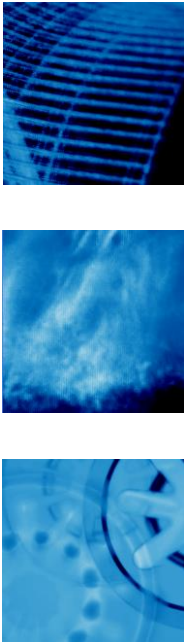
The mentioned values and data are recommended values which include the fault tolerances of measuring under diffusion conditions.

For sensor control, pre-processing of the sensor signals, storage of the calibration data and data communication we deliver an specific electronic module.

### Please ask us for customized solutions.

Patent applications : DE102004060101 B4 / DE102006033528 B3 / EP1602924 B1.

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