

Multi-Sensor-Platform

KBI2

The sensor platform is designed for the mounting of heated sensors. Using heat resistance the chip can be kept at a constant temperature or a temperature cycle can be operated. The platform integrates a temperature sensor (Pt 1000), a heater and interdigitated electrode structures (IDES) in platinum thin film on a ceramic substrate. Heater and sensor are covered with an insulating glass layer. Sensitive layers can be applied onto the non-passivated electrode structures by using screen process or drop-coating. That way the Multi-Sensor-Platform is converted into gas sensors, humidity sensors etc.

Application: Typical areas of application for the sensor platform are any type of gas sensors and physical sensors.

Connection: Ag wire \varnothing 0,25 mm

Lead length: 10 ± 1 mm (Custom specification)

IDES: Line / Gap: $15 \mu\text{m}$ / $15 \mu\text{m}$

Temperature range: $-200 \text{ }^\circ\text{C}$ to $+350 \text{ }^\circ\text{C}$

Nominal resistance and tolerance R_0 : Temperature sensor 1000Ω at $0 \text{ }^\circ\text{C}$
Class 2B (F 0,6) according to DIN EN 60 751
max. measuring current 0.3 mA

Heater: $8 \Omega \pm 1,5 \Omega$ at $0 \text{ }^\circ\text{C}$
Heating input 3 W at $200 \text{ }^\circ\text{C}$

Long-term stability: Test 1000 hours at $200 \text{ }^\circ\text{C}$

Advantages: Small size
Long-term stability
Short response time

