

Technical Data Sheet
Layered micro-electronic devices on Si wafer
Properties

Form : Layered micro-electronic devices on Si wafer

Preparation: Micro-fabrication techniques in clean room (photolithography, metal evaporation, PECVD deposition, and reactive plasma etching)

Full Name : Chemiresistive gas sensor platform with integrated heater

Device Size : 5x5 mm²

Structure : Micro-devices on Si wafer (4") with interdigital electrodes (Au), micro platin heater

Product Description

Micro-chemiresistive devices (~100 pieces) fabricated on Si wafer with dimension of 4 inch using micro-fabrication techniques in our cleanroom at SUNUM. Each device has a meander-shaped platin heater (thickness: 100 nm) and interdigital gold electrodes (thickness: 100 nm) which are electrically isolated with a Si₃N₄ layer deposited by PECVD. They have two kind of interdigitated electrodes with width/gap of 50 and 100 µm.

Application areas:

Chemiresistive gas sensing technology

Storage conditions: Room temperature in a desiccator (all devices are covered by PMMA layer to protect the surface).

Packaging : 100 micro devices on a Si wafer (2 inch)

Quality Control

Optical images



