

CMOSIR

FUTURE
GENERATION
COMPONENTS





CMOS IR offers MEMS IR Emitter chips & Thermopile IR Detector chips of the latest generation. **As the only manufacturer in the world, we supply bare dies, thus enabling very compact system integration.**

Our customers can thus design and use state-of-the-art technologies quickly and flexibly. The company CMOS IR develops and manufactures infrared MEMS chips for gas measurement and other applications in industry, building automation and environmental metrology.

Our components are optimized for short time constant and wide spectral range (2 - 15 μm). We offer long term stability and cost efficient products at the same time. Delivery is at chip respectively wafer level or with standard and custom packages - TO39 or TO46, ceramic SMD package available. Chiplevel offers units from 5000 pieces. In the package smaller quantities starting from 200 are available. Sample kits and custom packages are available on request.

IR EMITTER CHIPS & THERMOPILE DETECTORS

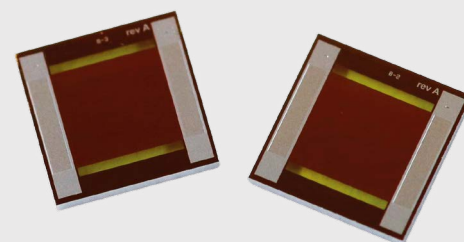
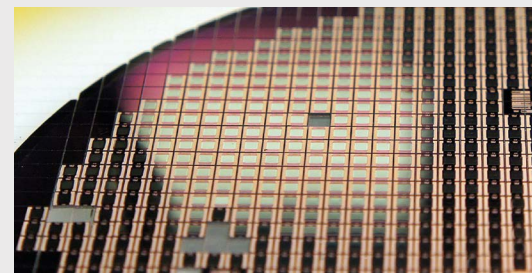
- CMOS compatible manufacturing technology
- Highly scalable for very large quantities
- Long life time & stability

EMITTER C-MOSI® 500

- Description**
- MEMS based IR Emitter chip with high optical radiation output power, high modulation depth and spectral range of 2 - 15 μm
 - Active area 2.2 mm x 2.3 mm
 - Maximum power rating 900 mW – providing 800° C radiation temperature
 - Time constant of 15 ms

- Service**
- Customer specific packaging

- Application**
- **CO₂ Detection:**
For industrial gas sensors and medical technology (respiratory gas analyses)
 - **CH₄ and C₃H₈ measurements:**
Monitoring explosive gases / biogas plants / petroleum and gas industry

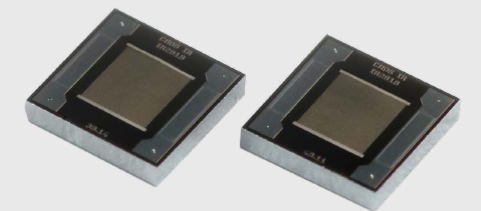
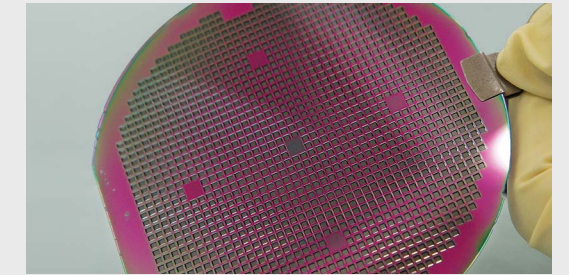


EMITTER C-MOSI® 100

- Description**
- Cost efficient replacement of light bulbs
 - Long term stability of optical properties
 - Covering the spectral range 2 - 15 μm
 - Active area 1 mm x 1 mm
 - Typical power rating 250 mW – providing 600 ° C radiation temperature
 - Short time constant of 8 ms

- Service**
- Customer specific packaging

- Application**
- **CO₂ detection:**
Home & building automation and smart cities



BENEFITS FOR YOUR APPLICATIONS

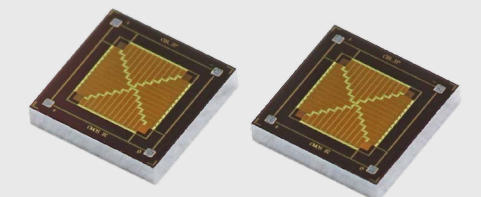
- Cost efficient product available in large volume
- Delivery of bar dies and wafers
- Enabling high level of system integration

IR THERMOPILE DETECTOR CHIP

- Description**
- MEMS based Thermopile Detector
 - Spectral range 2 - 15 μm
 - Sensitive area 1.2 mm x 1.2 mm

- Service**
- Customer specific packaging
 - Customer specific layout modifications

- Application**
- Compact system integration together with high performance C-MOSI® Emitter



Contact us for sample requests and packaging options.

www.cmosir.com

CMOS IR is a member of the Micro-Epsilon Group.
MICRO-HYBRID Electronic GmbH is partner for packaging and system integration.





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