

Press release

January 2019

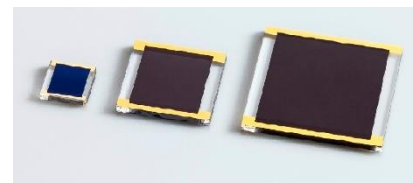
## Infrared detectors Hertzstück™ with new encapsulation technology readily bondable

- New encapsulation technique for photo conductors enables direct wirebonding of bare chips
- Automatization and miniaturization in the sensor assembly
- PbS and PbSe Infrared detectors with spectral range from 1  $\mu\text{m}$  – 5  $\mu\text{m}$

Traditionally manufactured lead salt detectors require TO-packaging for environmental protection and long-term stability. However, the TO-packages take up space and their placement and precise adjustment can be complex for specific applications.

The thin film encapsulation applied on Hertzstück™ provides the stability of TO-packaging in the thin form of bare chips. Environmental influences like water and oxygen and thus degradation are eliminated. Package size and total footprint are reduced. The size and shape of bare chip Hertzstück™ sensors make them well suited to automated assembly via pick-and-place robot. This combination of benefits means that with Hertzstück™ bare chips, many applications can be smaller, cost less to assemble, and have better alignment tolerances. Hertzstück™ sensors are available for wavelength range up to 3  $\mu\text{m}$  (PbS) and up to 5  $\mu\text{m}$  (PbSe). Standard sizes range from 0.5 x 0.5 mm<sup>2</sup> up to 10 x 10 mm<sup>2</sup>.

The infrared detectors Hertzstück™ are developed and completely manufactured at a production site in Ludwigshafen, Germany. Detailed specifications can be found at [www.hertzstueck.de](http://www.hertzstueck.de).



Bare chip IR-sensors Hertzstück™

### About Hertzstück™

Hertzstück™ is a brand of trinamiX GmbH, a spin-off and wholly owned subsidiary of BASF SE. trinamiX GmbH was founded in 2015 and is based in Ludwigshafen, Germany. The team around Hertzstück™ consists of experts from various competence areas such as chemistry, physics, material science and engineering. We offer standard and custom-engineered products in the field of infrared (IR) detection. [www.hertzstueck.de](http://www.hertzstueck.de)

#### Sales contact

Adrian Vogel  
adrian.vogel@hertzstueck.de  
T +49 621 60 91236  
M +49 1522 2883039

#### Media contact

Ines Kühn  
ines.kuehn@trinamix.de  
T +49 621 60 42082  
M +49 173 3478340

**trinamiX GmbH**  
Industriestraße 35  
67063 Ludwigshafen  
Germany

**Contact**  
T +49 (0) 621 60 97165  
W [www.hertzstueck.de](http://www.hertzstueck.de)  
E [info@hertzstueck.de](mailto:info@hertzstueck.de)

**Managing Director**  
Dr. Ingmar Bruder  
**Registered Office**  
67063 Ludwigshafen

**Registration Court**  
Amtsgericht Ludwigshafen  
**Registration Number**  
HRB 62900  
**VAT No.:**  
DE280928150

**Bank Account**  
BNP Paribas S.A. – Frankfurt  
**IBAN** DE34 5121 0600 4220 7870 16  
**SWIFT BIC** BNPAP333