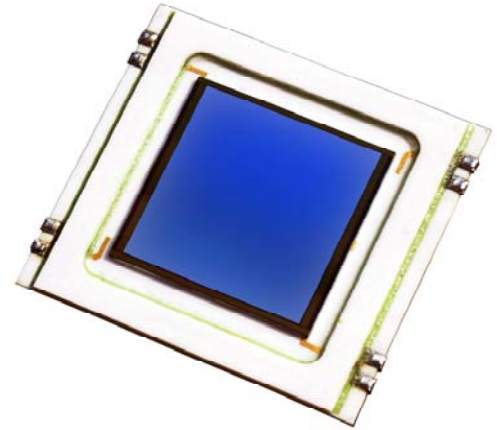


DL-400-7-KER 4.1 SMD

Position Sensing Photodiodes

Special characteristics:

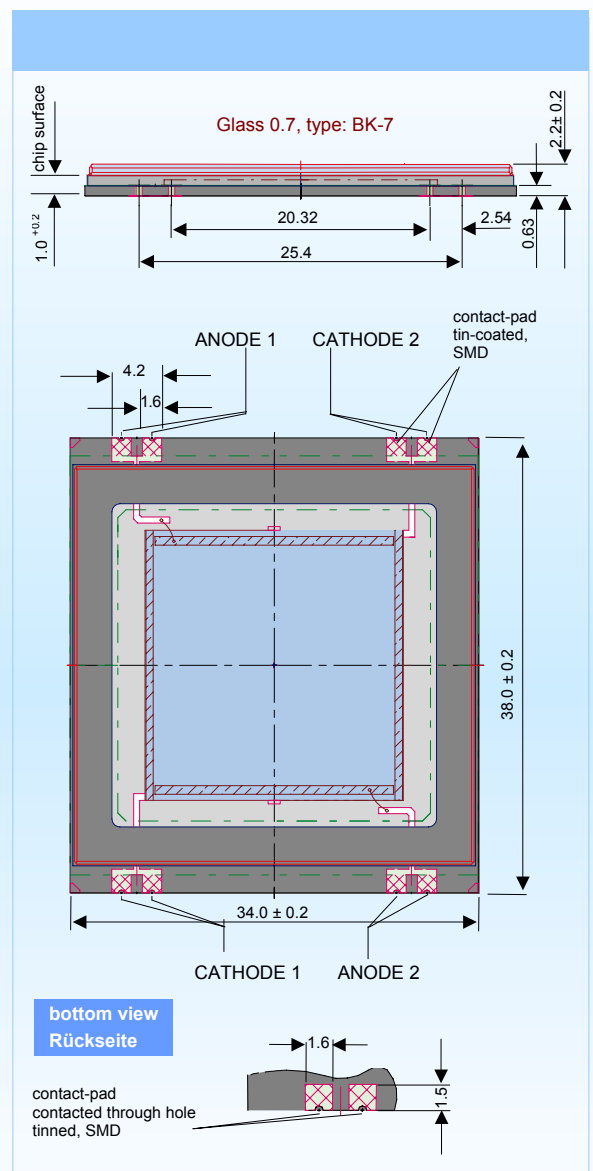
**dual-axis, duo-lateral PSD
active area 20 x 20 mm
high position resolution and
high linearity**



| Parameters: | DL-400-7-KER 4.1 SMD |
|---|-----------------------------------|
| active area | 20 x 20 mm 400 mm ² |
| Dark current at 10 V | max. 2 μ A typ. 800 nA |
| Capacitance at 10 V, 100 kHz | typ. 350 pF |
| Spectral responsivity at 633 nm at 850 nm | typ. 0,4 A/W typ. 0,62 A/W |
| Interelectrode resistance at E = 0 lx | typ. 12 k Ω |
| Rise time at 10 V, 50 Ω , 865 nm | typ. 4 μ s |
| Noise limited resolution at 632 nm, 0,5 μ W | 0,3 μ m |
| Position Detection Error ¹⁾ at 632 nm | +/- 1% |
| Breakdown voltage | typ. 100 V |
| Package | Ceramic S.M. |
| Operating temperature | -20 ... +70°C |
| Storage temperature | -60 ... +100°C |

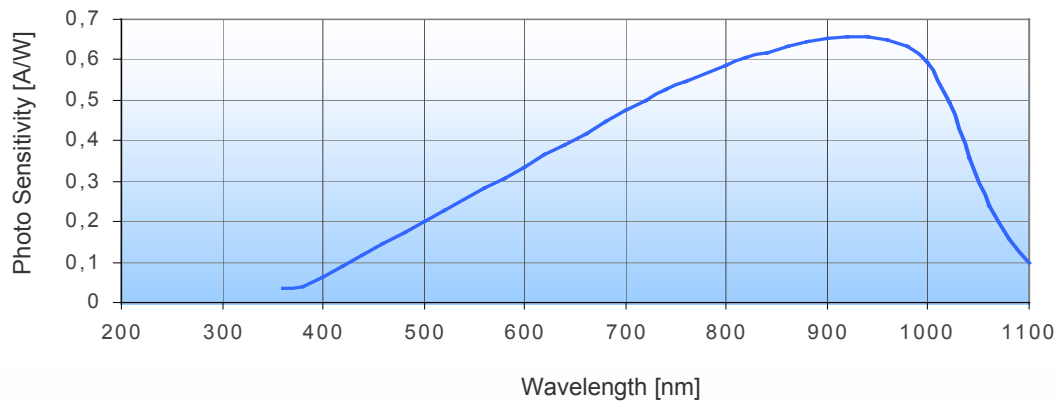
1) measurement conditions:

Spot size: 0,5 mm,
Scan Interval: 1 mm
Wavelength: 633 nm



Spectral responsivity (A/W)

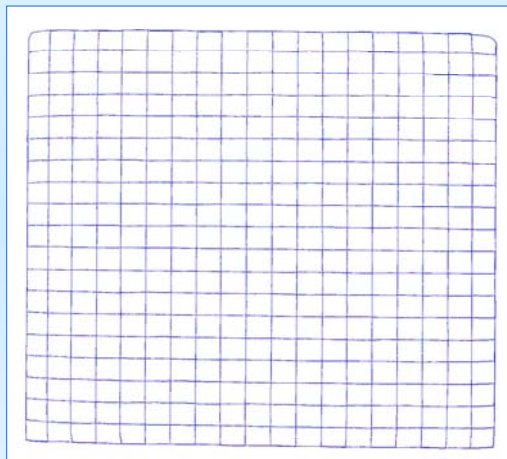
series-7



Handling precautions

- Soldering temperature 260°C for max. 10 s. The device must be protected against solder flux vapour!
- ESD – protection only small danger for the device. Standard precautionary measures are sufficient.
- Avoid touching the window with fingers!
- Careful cleaning with Ethyl alcohol possible.
- Avoid use of pointed and scratching tools!
- Store devices in conductive foam

Linearity Plot DL-400-7-KER 4.1 SMD



(Typical Plot)

- Scan Interval: 1 mm
- Spot: Ø 500 µm
- Wavelength: 633 nm

International Sales :

Silicon Sensor GmbH

Ostendstr. 1, 12459 Berlin
Germany

Phone: +49 (0)30-6399 2345

Fax: +49 (0)30-6399 2333

email: sales@silicon-sensor.de

Silicon Sensor GmbH

U.K. Office

Waterworks House

Fognam Down, Upper Lambourn

Berkshire RG 17 8RB

Phone: +44 (0)1488/ 7 39 33

Fax: +44 (0)1488/67 00 43

email: pnsilensuk@btinternet.com

U.S.A. :

Pacific Silicon Sensor, Inc.

5700 Corsa Avenue #105

Westlake Village, CA 91362 USA

Phone: +1-818-706-3400

Fax: +1-818-889-7053

email: sales@pacific-sensor.com