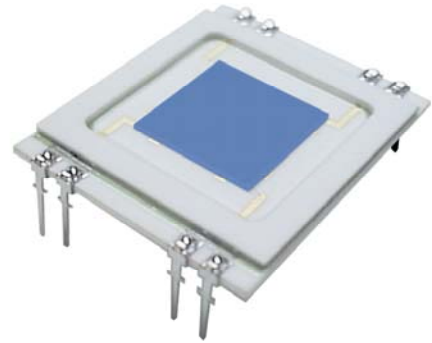


# DL-100-7-KER pin

## Position Sensing Photodiodes

### Special characteristics:

**dual-axis, duo-lateral PSD  
active area 10 x 10 mm  
high position resolution and  
high linearity**

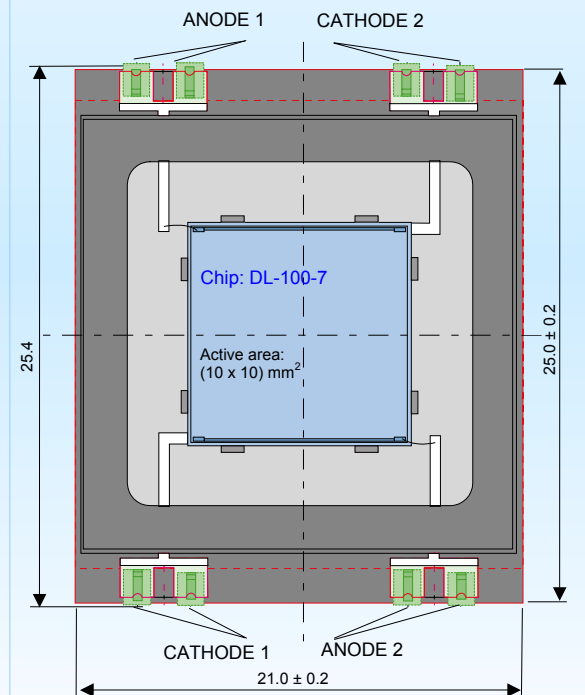
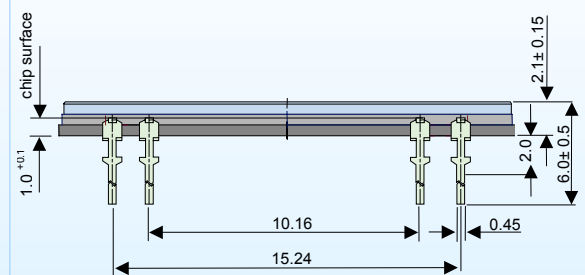


Parameters:	DL-100-7-KER pin
active area	10 x 10 mm 100 mm <sup>2</sup>
Dark current at 10 V	max. 300 nA typ. 80 nA
Capacitance at 10 V, 100 kHz	typ. 75 pF
Spectral responsivity at 633 nm at 850 nm	typ. 0,4 A/W typ. 0,62 A/W
Interelectrode resistance at E = 0 lx	typ. 12 kΩ
Rise time at 10 V, 50 Ω, 865 nm	typ. 4 μs
Noise limited resolution at 632 nm, 0.5 μW	0.2 μm
Position Detection Error <sup>1)</sup> at 632 nm	+/- 1%
Breakdown voltage	typ. 30 V
Package	Ceramic with pins
Operating temperature	-20 ... +70°C
Storage temperature	-60 ... +100°C

#### 1) measurement conditions:

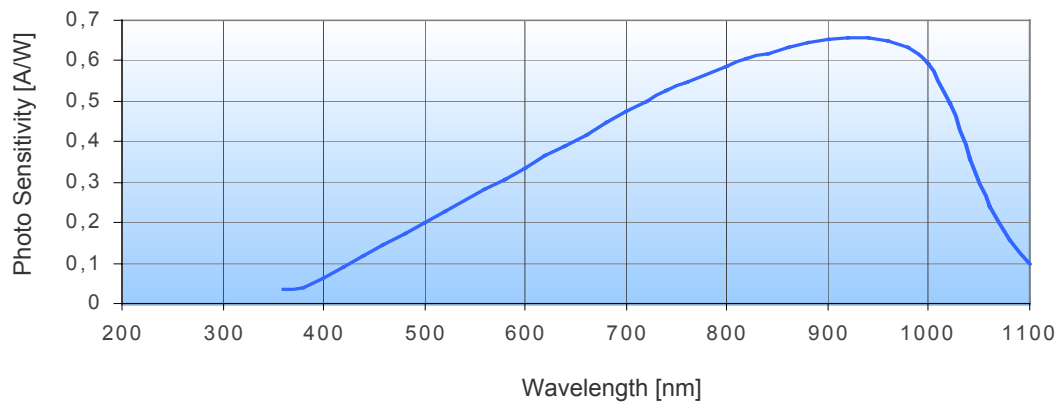
Spot size: 0,5 mm,  
Scan Interval: 1 mm  
Wavelength: 633 nm

### Package 21 (SMD with pins)



## Spectral responsivity (A/W)

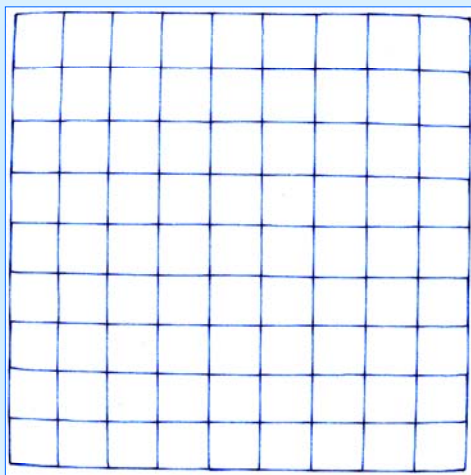
series-7



### Handling precautions

- Soldering temperature 260°C for max. 10 s. The device must be protected against solder flux vapour. Min. pin - length 2 mm!
- 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-100-7-KER pin



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

(Typical Plot)

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