
**Features**

- 3.5 mm x 1 mm active area
- High position resolution
- High NIR sensitivity
- High linearity

**Description**

3.5 mm<sup>2</sup> single axis position sensing detector (PSD). Packaged in clear resin moulded lead frame SO8. Reflow solderable.

**Application**

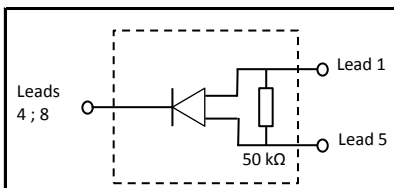
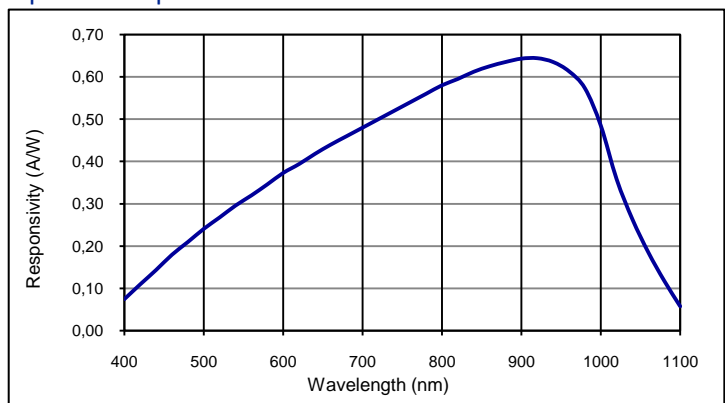
- Distance measurement
- Optoelectronic displacement transducer
- Proximity sensor

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
T <sub>STG</sub>	Storage temp	-40	100	°C
T <sub>OP</sub>	Operating temp	-25	85	°C
V <sub>R(OP)</sub>	Reverse operating	-	30	V
I <sub>PEAK</sub>	Peak DC current	-	10	mA

**Schematic**

**Spectral response**

**Electro-optical characteristics @ 23 °C**

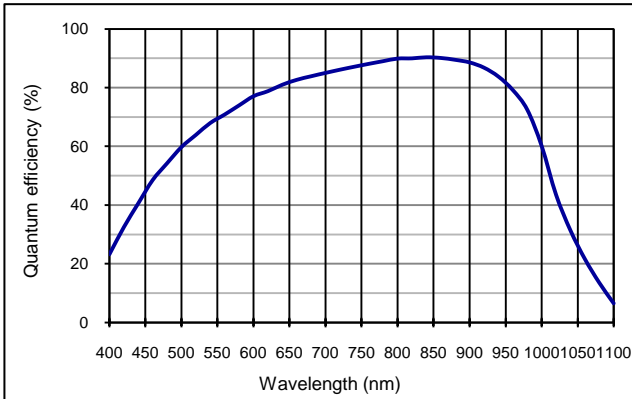
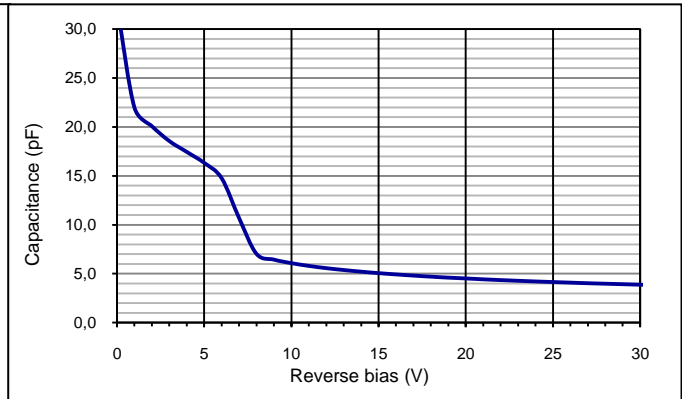
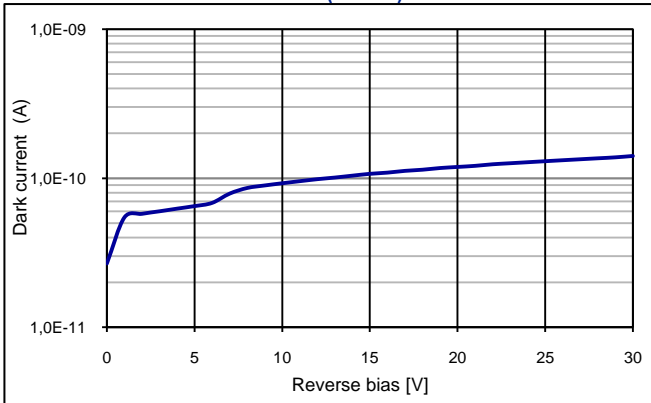
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		3500 x 1000			µm
	Active area		3.5			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		6.5	10	nA
C	Capacitance	V <sub>R</sub> = 10 V		7		pF
	Responsivity	V <sub>R</sub> = 0 V; λ = 850 nm		0.59		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 10 V; λ = 865 nm; R <sub>L</sub> = 50 Ω		0.2		µs
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 10 µA		35		V
	Interelectrode resistance	E = 0 lx	30	50	70	kΩ
	Noise lim. resolution	λ = 632 nm; P = 0.5 µW, spot dia. 0.5 mm		0.05		µm
	Position detection error	λ = 632 nm; P = 0.5 µW, spot dia. 0.5 mm		± 0.2	± 1.0	%

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**Quantum efficiency (23 °C)**

**Capacitance as fct of reverse bias (23 °C)**

**Dark current as fct of bias (23 °C)**


Handling: Please refer to document "Instructions for handling and processing"

Disclaimer: Due to our strive for continuous improvement, specifications are subject to change within our PCN policy according to JESD46C.

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