
**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). PCB based package, not reflow solderable.

**Application**

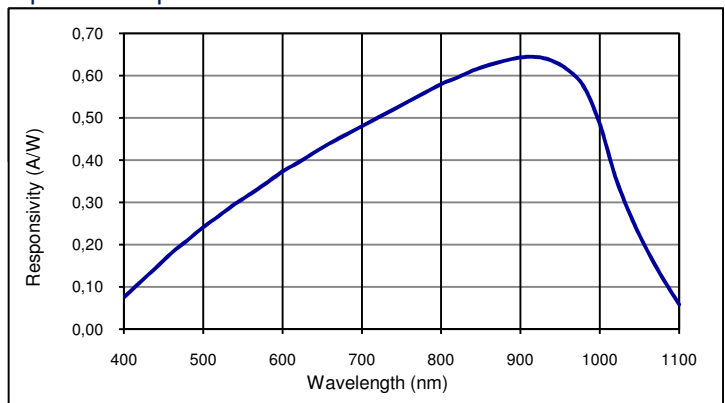
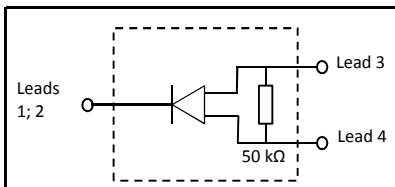
- Distance measurement
- Optoelectronic displacement transducer
- Proximity sensor

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
$T_{STG}$	Storage temp	-40	100	°C
$T_{OP}$	Operating temp	-25	85	°C
$V_{R(OP)}$	Reverse operating	-	30	V
$I_{PEAK}$	Peak DC current	-	10	mA

**Spectral response**

**Schematic**

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

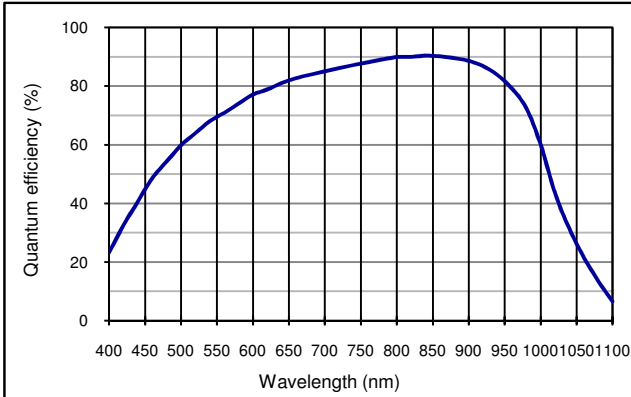
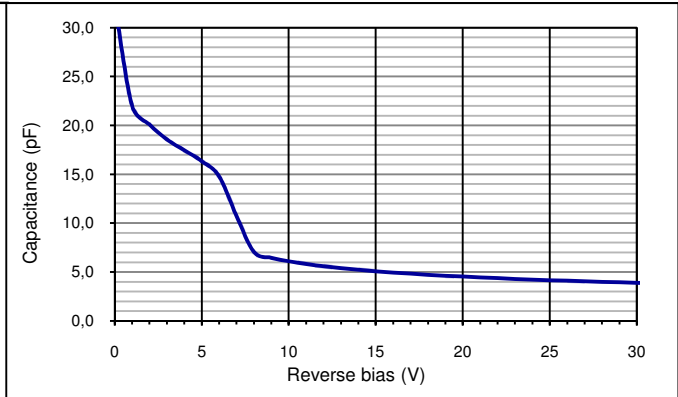
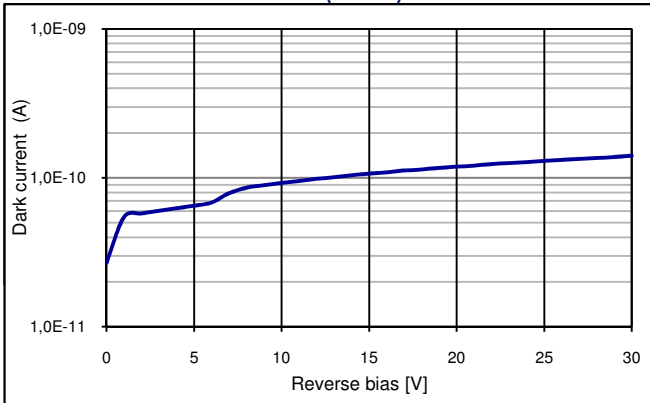
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		3500 x 1000			μm
	Active area		3.5			mm <sup>2</sup>
$I_D$	Dark current	$V_R = 10$ V		6.5	10	nA
C	Capacitance	$V_R = 10$ V		7		pF
	Responsivity	$V_R = 0$ V; $\lambda = 850$ nm		0.59		A/W
$t_R$	Rise time	$V_R = 10$ V; $\lambda = 865$ nm; $R_L = 50$ Ω		0.2		μs
$V_{BR}$	Breakdown voltage	$I_R = 10$ μA		35		V
	Interelectrode resistance	$E = 0$ lx	30	50	70	kΩ
	Noise lim. resolution	$\lambda = 632$ nm; $P = 0.5$ μW, spot dia. 0.5 mm		0.05		μm
	Position detection error	$\lambda = 632$ 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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