
Features

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

Description

3.5 mm² single axis position sensing detector (PSD). PCB based package, not reflow solderable.

Application

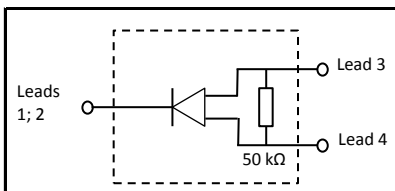
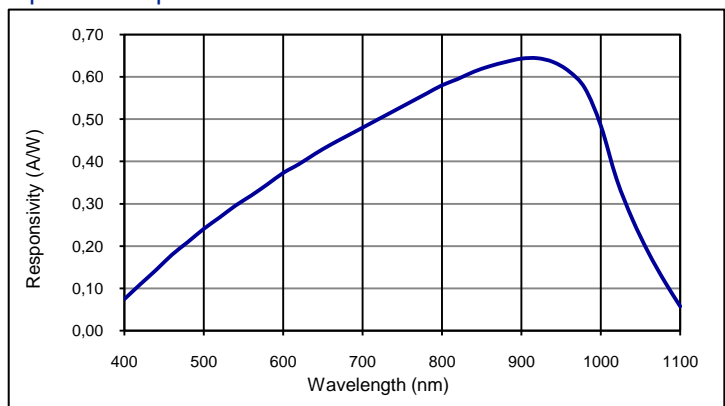
- Distance measurement
- Optoelectronic displacement transducer
- Proximity sensor

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

Schematic

Spectral response

Electro-optical characteristics @ 23 °C

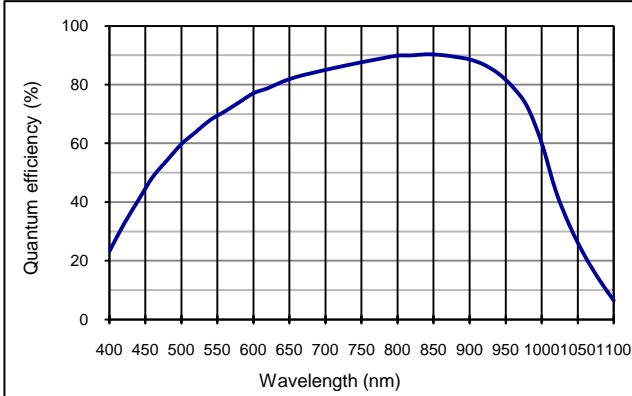
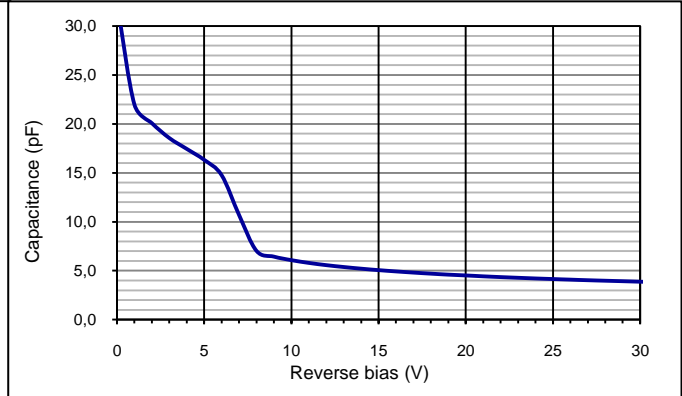
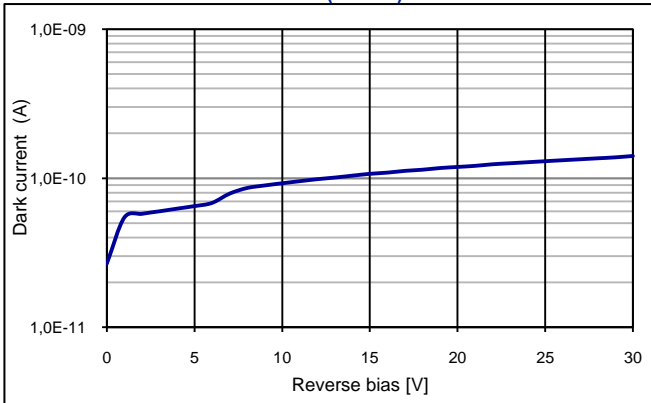
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		3500 x 1000			μm
	Active area		3.5			mm ²
I _D	Dark current	V _R = 10 V		6.5	10	nA
C	Capacitance	V _R = 10 V		7		pF
	Responsivity	V _R = 0 V; λ = 850 nm		0.59		A/W
t _R	Rise time	V _R = 10 V; λ = 865 nm; R _L = 50 Ω		0.2		μs
V _{BR}	Breakdown voltage	I _R = 10 μA		35		V
	Interelectrode resistance	E = 0 lx	30	50	70	kΩ
	Noise lim. resolution	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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