
Features

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

Description

6 mm² single axis position sensing detector (PSD). Packaged in clear resin moulded lead frame SO16. Reflow solderable.

Application

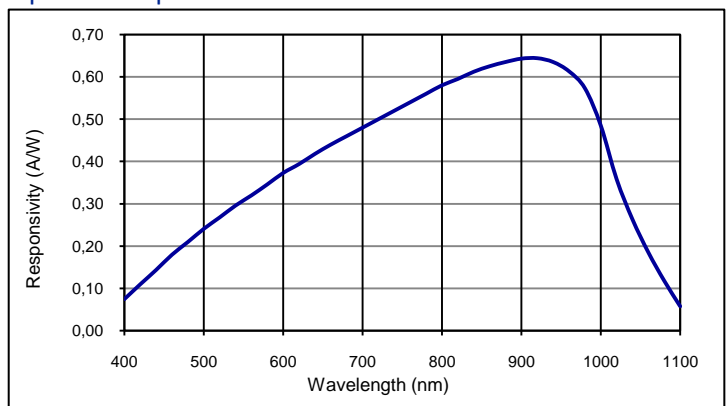
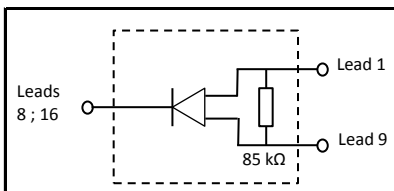
- Distance measurement
- Optoelectronic displacement transducer
- Proximity sensor

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	-	20	V
I _{PEAK}	Peak DC current	-	10	mA

Spectral response

Schematic

Electro-optical characteristics @ 23 °C

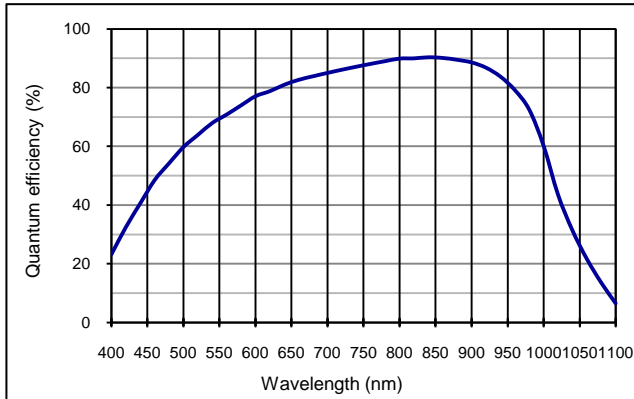
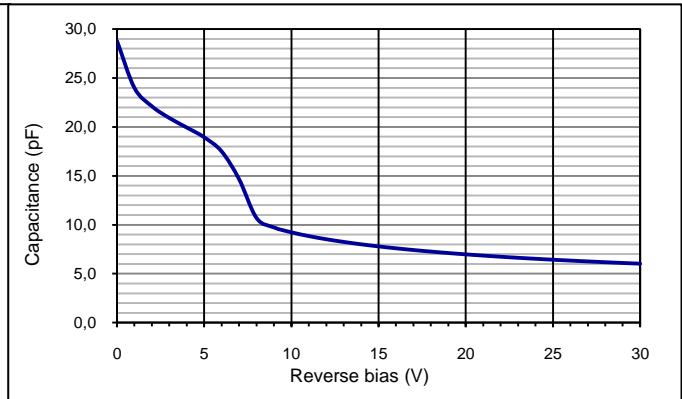
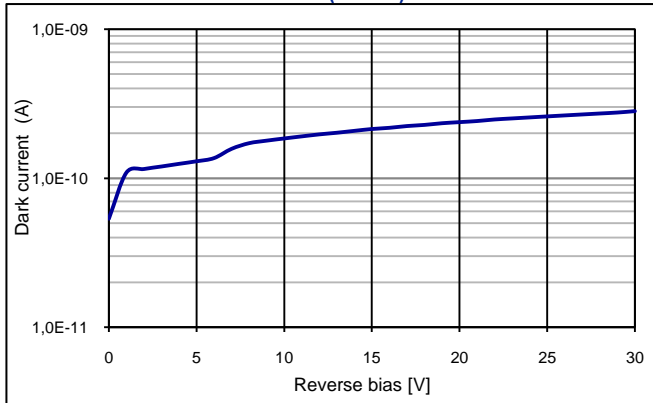
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		6000 x 1000			μm
	Active area		6			mm ²
I _D	Dark current	V _R = 10 V		10	20	nA
C	Capacitance	V _R = 10 V		12		pF
	Responsivity	V _R = 0 V; λ = 850 nm		0.59		A/W
t _R	Rise time	V _R = 10 V; λ = 865 nm; R _L = 50 Ω		0.2		μs
V _{BR}	Breakdown voltage	I _R = 10 μA		30		V
	Interelectrode resistance	E = 0 lx	65	85	105	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	%

European, International Sales:


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 T +49 30 6399 2399
 F +49 30 639923-752
 sales.opto@first-sensor.com

USA:


First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

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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 Germany
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