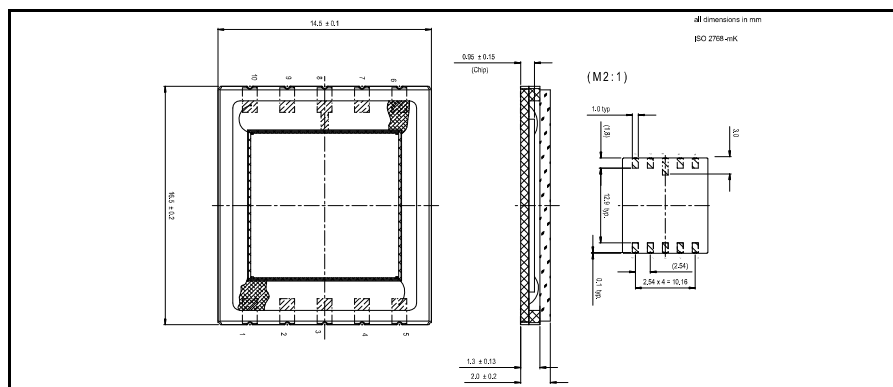
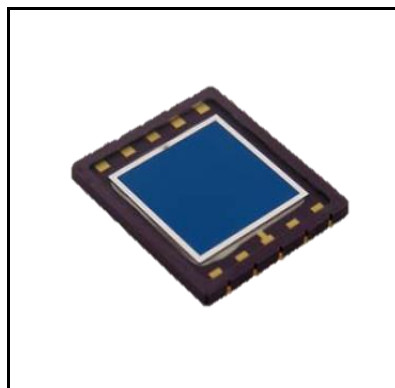




Features

- 100 mm² PSD
- Dual-axis, duo-lateral
- High position resolution
- High NIR sensitivity

Description

Square active area position sensing
PIN photodiode with 100 mm² active area. Ceramic carrier type non-hermetic package with clear glass window.

Application

- Laser positioning
- Precision photometry
- Instrumentation
- Medical equipment
- Pulsed light sensor

RoHS

2011/65/EU

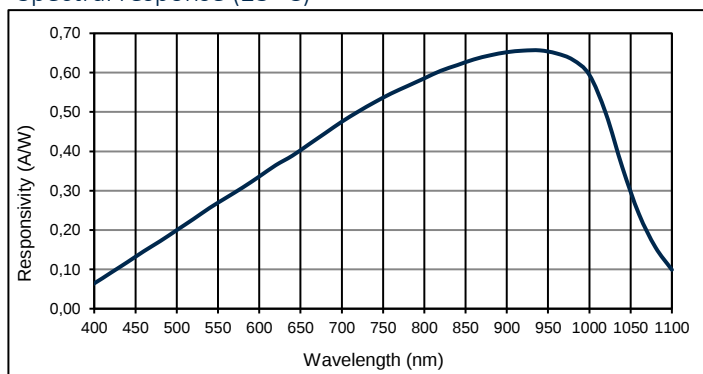
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{STG}	Storage temp	-20	80	°C
T_{OP}	Operating temp	-20	60	°C
V_{max}	Max reverse voltage	20		V
I_{PEAK}	Peak DC current		10	mA

Connection table

Cathode 1	Lead 6
Cathode 2	Lead 1
Anode 1	Lead 5
Anode 2	Lead 10

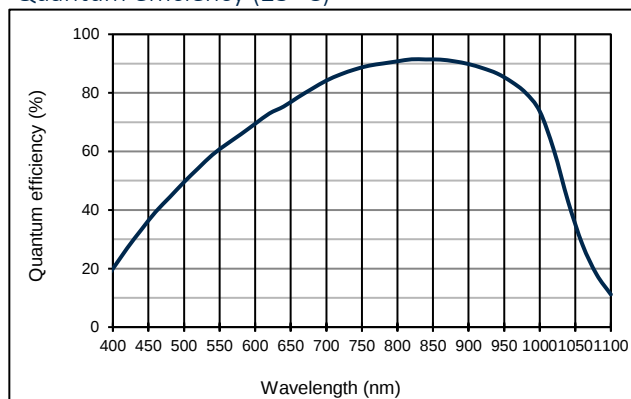
Spectral response (23 °C)



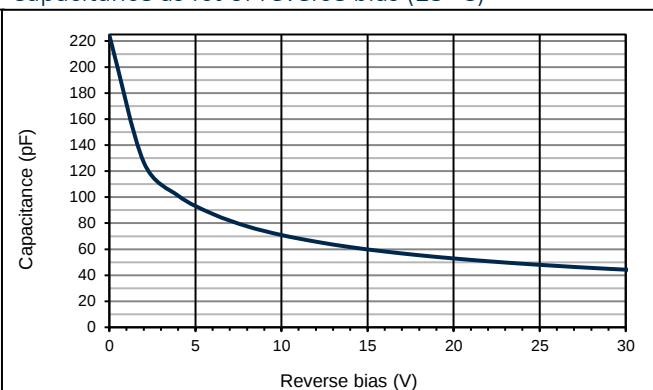
Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		10 x 10			mm
	Active area		100.0			mm ²
I_D	Dark current	$V_R = 10\text{ V}$		80	300	nA
C	Capacitance	$V_R = 0\text{ V}$		225		pF
		$V_R = 10\text{ V}$		75		pF
	Responsivity	$\lambda = 633\text{ nm}$		0.4		A/W
		$\lambda = 850\text{ nm}$		0.62		A/W
t_R	Rise time	$V_R = 10\text{ V}; \lambda = 865\text{ nm}; R_L = 50\ \Omega$		4000		ns
	Interelectrode Resistance	$E = 0\text{ lx}$		12		k Ω
	Noise lim. resolution	$\lambda = 632\text{ nm}; P = 0.5\ \mu\text{W}$, spot dia. 0.5 mm		0.2		μm
	Position detection error	$\lambda = 632\text{ nm}; P = 0.5\ \mu\text{W}$, spot dia. 0.5 mm		± 1		%
V_{BR}	Breakdown voltage	$I_R = 2\ \mu\text{A}$		30		V

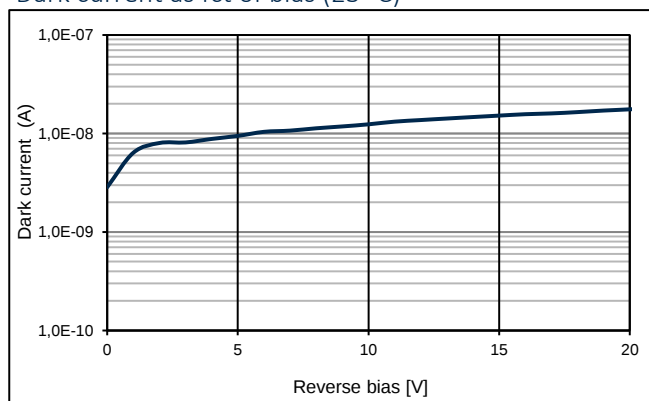
Quantum efficiency (23 °C)



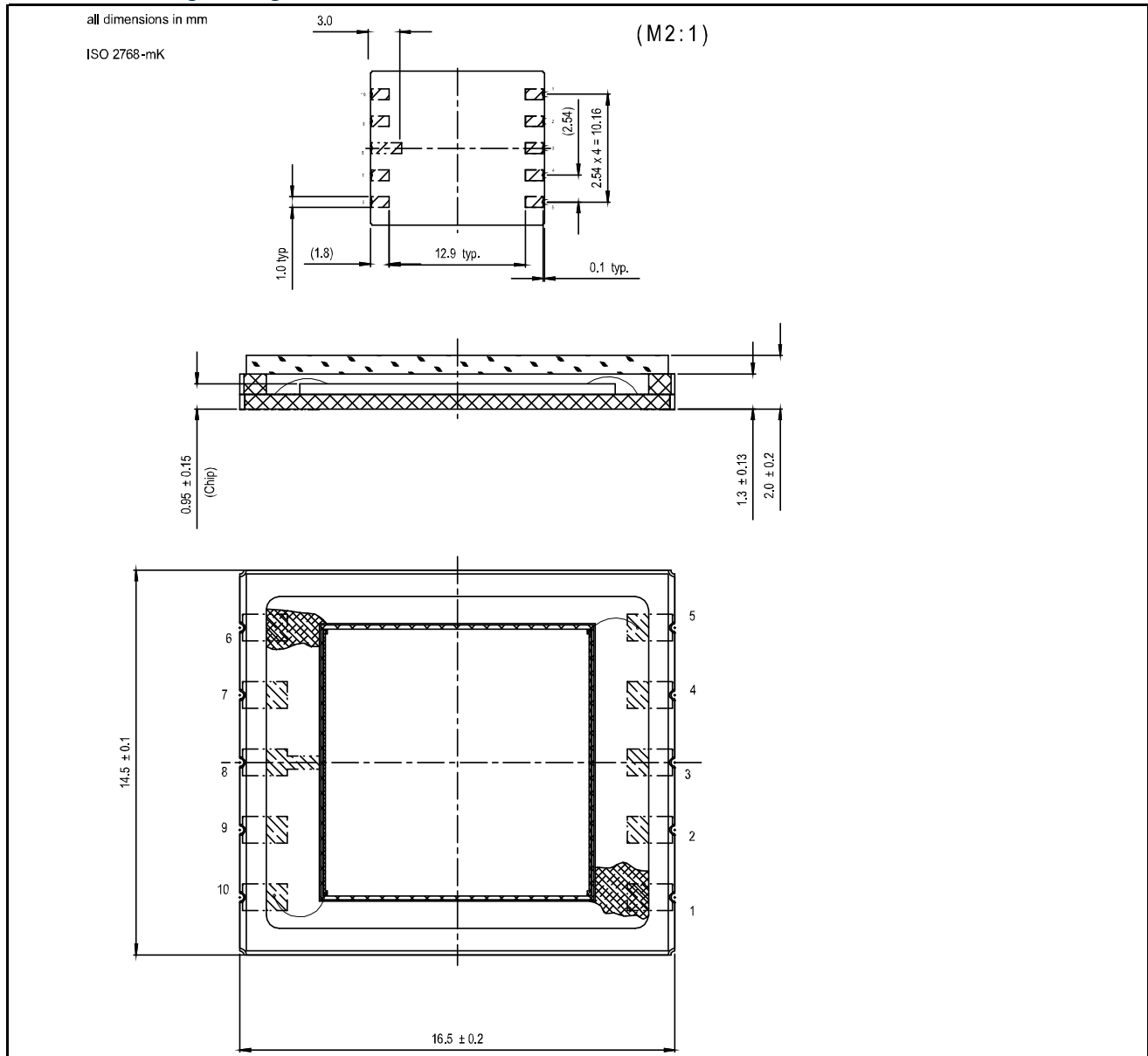
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Technical Drawing, Package: LCC10



Package dimension:

Small quantities: Foam pad, boxed (12 cm x 16.5 cm)

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.