
Features

- 1000 μm x 1000 μm active area
- Low dark current
- Fast response time
- High speed epitaxy

Description

High speed epitaxy PIN photodiode with 1.0 mm² square active area. Ceramic carrier type non hermetic SMD package with clear glass window (501128) or silicone filling (501008). Reflow solderable.

Application

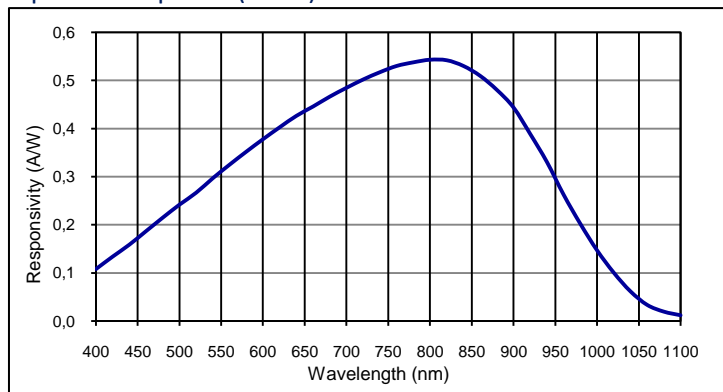
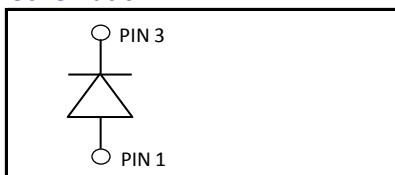
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Fiber optic light monitoring

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	100	°C
T _{OP}	Operating temp	-20	70	°C
V _{max}	Max reverse voltage		40	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

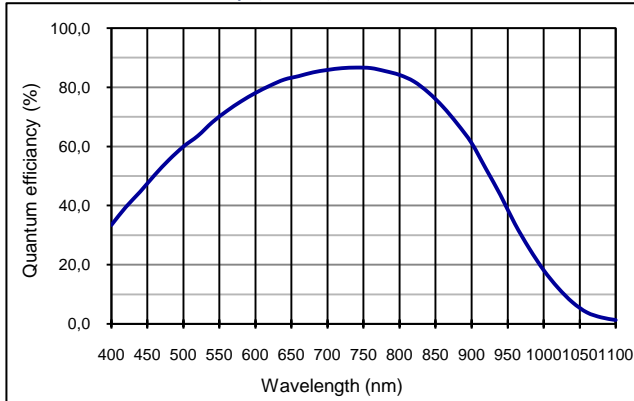
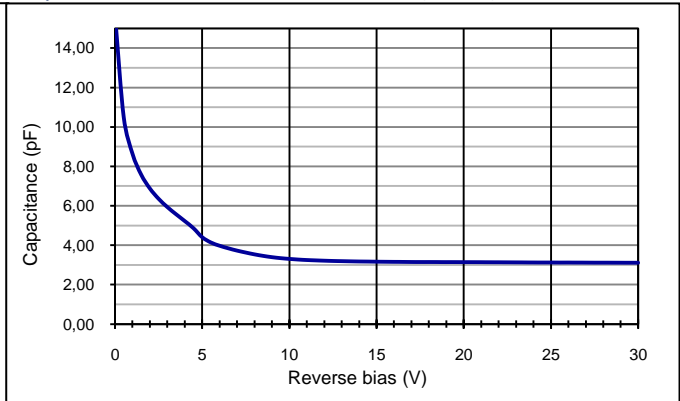
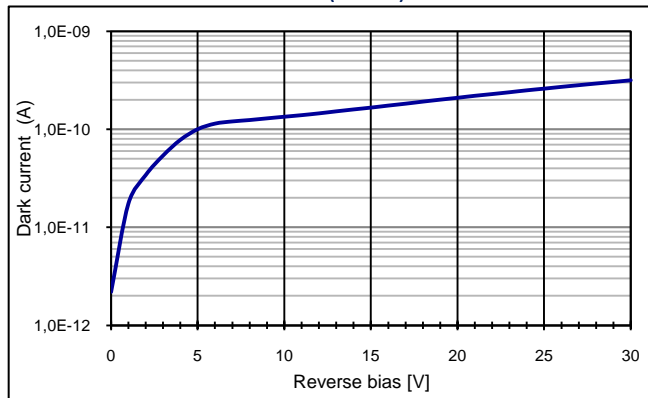
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		1000 x 1000			μm
	Active area		1.0			mm ²
I _D	Dark current	V _R = 20 V		0.2		nA
C	Capacitance	V _R = 0 V		20		pF
C	Capacitance	V _R = 20 V		3.5		pF
	Responsivity	λ = 635 nm		0.4		A/W
	Responsivity	λ = 800 nm		0.52		A/W
t _R	Rise time	V _R = 20 V; λ = 850 nm; R _L = 50 Ω		1.0		ns
V _{BR}	Breakdown voltage	I _R = 2 μA	40	50		V
	Shunt resistance	V _R = 10 mV		500		MΩ
	N.E.P.	V _R = 20 V; λ = 850 nm		1.5 E-14		W/√Hz

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Quantum efficiency (23 °C)

Capacitance as fct of reverse bias (23 °C)

Dark current as fct of bias (23 °C)

Application hints:

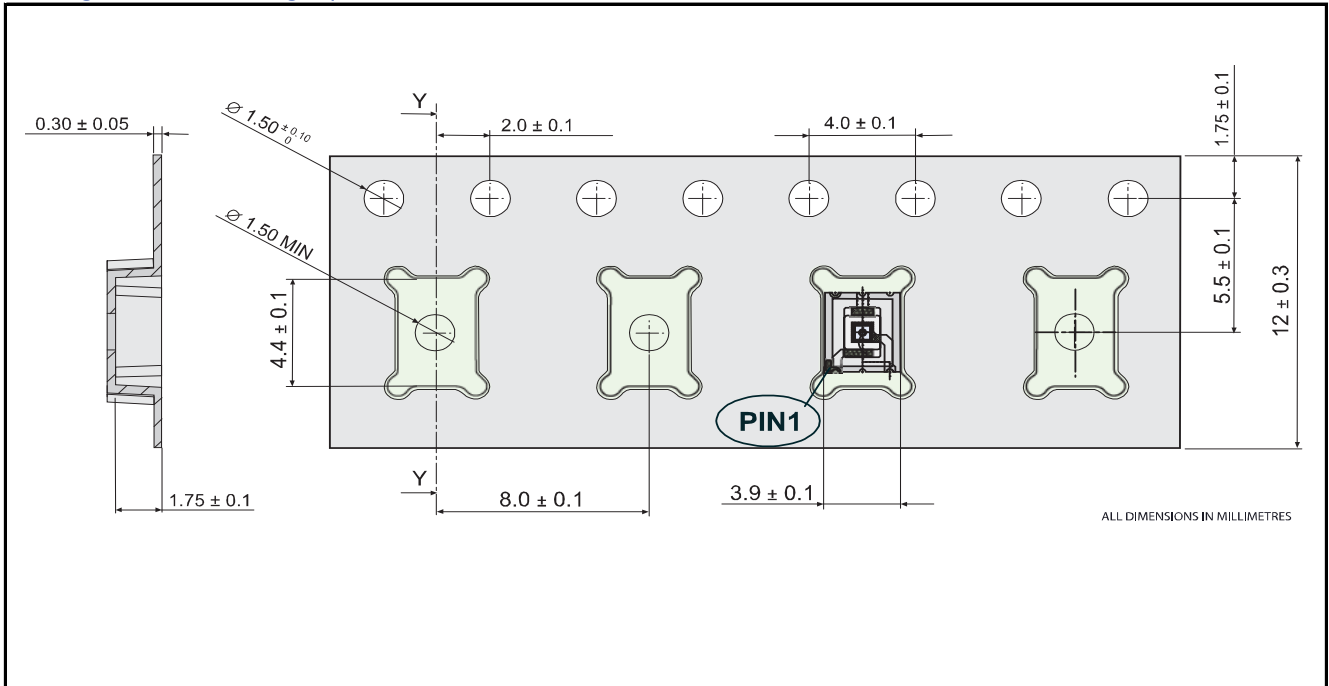
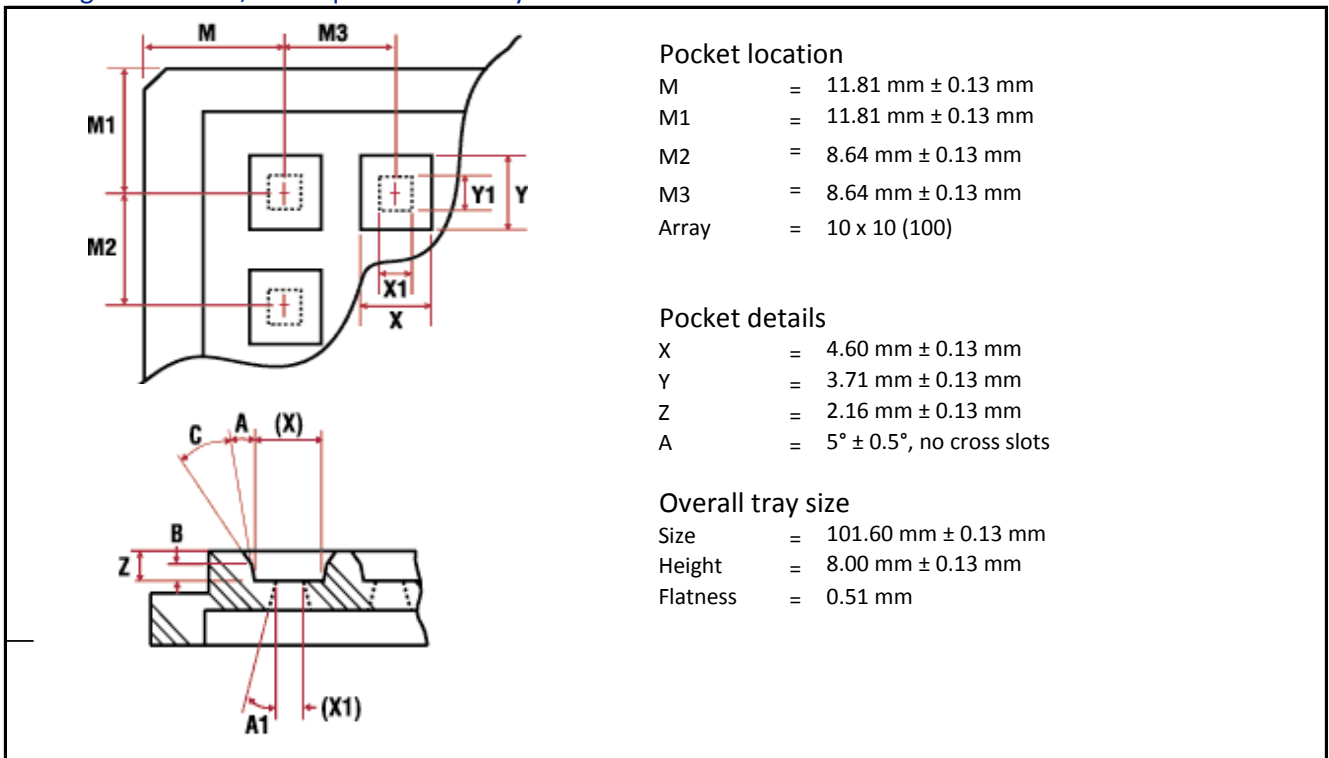
Please refer to document "Instructions for handling and processing"

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Package dimension, large quantities on reel

Package dimension, small quantities in trays


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

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