

Features

- 500 μm x 500 μm active area
- Low dark current
- Fast response time
- High speed epitaxy

Description

High speed epitaxy PIN photodiode with 0.25 mm² square active area. PCB carrier type non hermetic SMD 1206 package with epoxy moulding. Reflow solderable.

Application

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

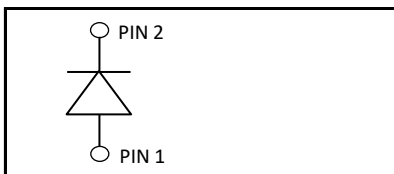
RoHS

2011/65/EU

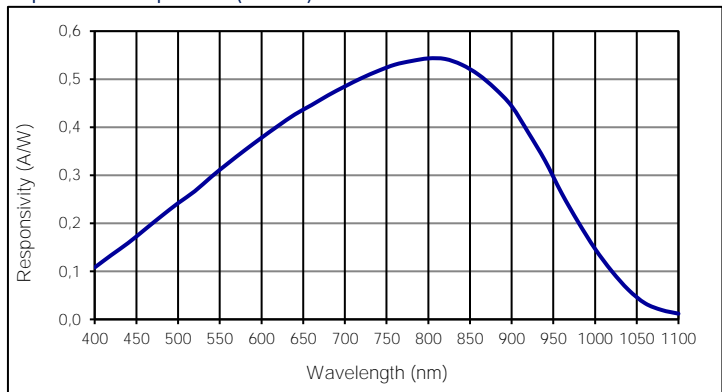
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{STG}	Storage temp	-45	100	$^{\circ}\text{C}$
T_{OP}	Operating temp	-40	85	$^{\circ}\text{C}$
V_{max}	Max reverse voltage		30	V
I_{PEAK}	Peak DC current		10	mA

Schematic



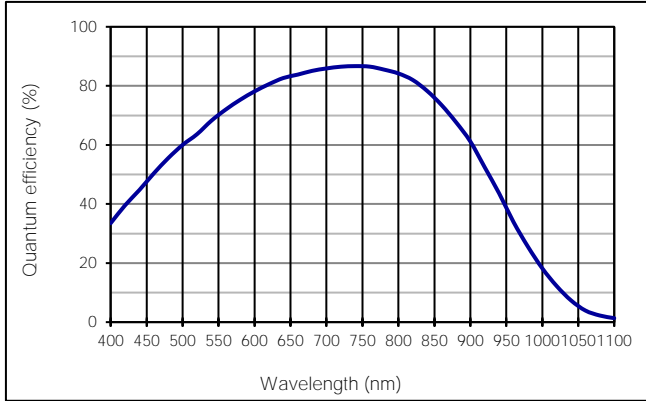
Spectral response (23 $^{\circ}\text{C}$)



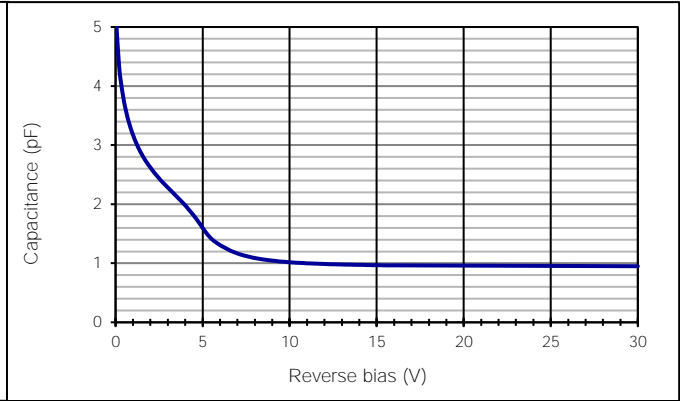
Electro-optical characteristics @ 23 $^{\circ}\text{C}$

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		500 x 500			μm
	Active area		0.25			mm ²
I_D	Dark current	$V_R = 20\text{ V}$		0.1		nA
C	Capacitance	$V_R = 0\text{ V}$		6		pF
C	Capacitance	$V_R = 20\text{ V}$		1.8		pF
	Responsivity	$\lambda = 635\text{ nm}$		0.4		A/W
	Responsivity	$\lambda = 800\text{ nm}$		0.52		A/W
t_R	Rise time	$V_R = 20\text{ V}; \lambda = 850\text{ nm}; R_L = 50\ \Omega$		0.4		ns
V_{BR}	Breakdown voltage	$I_R = 2\ \mu\text{A}$	30	50		V
	Shunt resistance	$V_R = 10\text{ mV}$		1000		M Ω
	N.E.P.	$V_R = 20\text{ V}; \lambda = 850\text{ nm}$		1.1 E-14		W/ $\sqrt{\text{Hz}}$

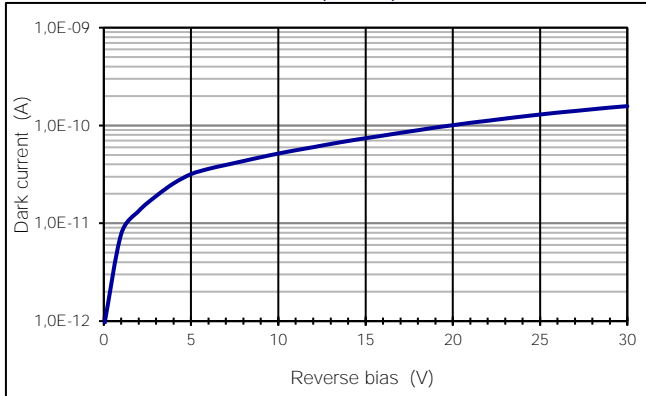
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)



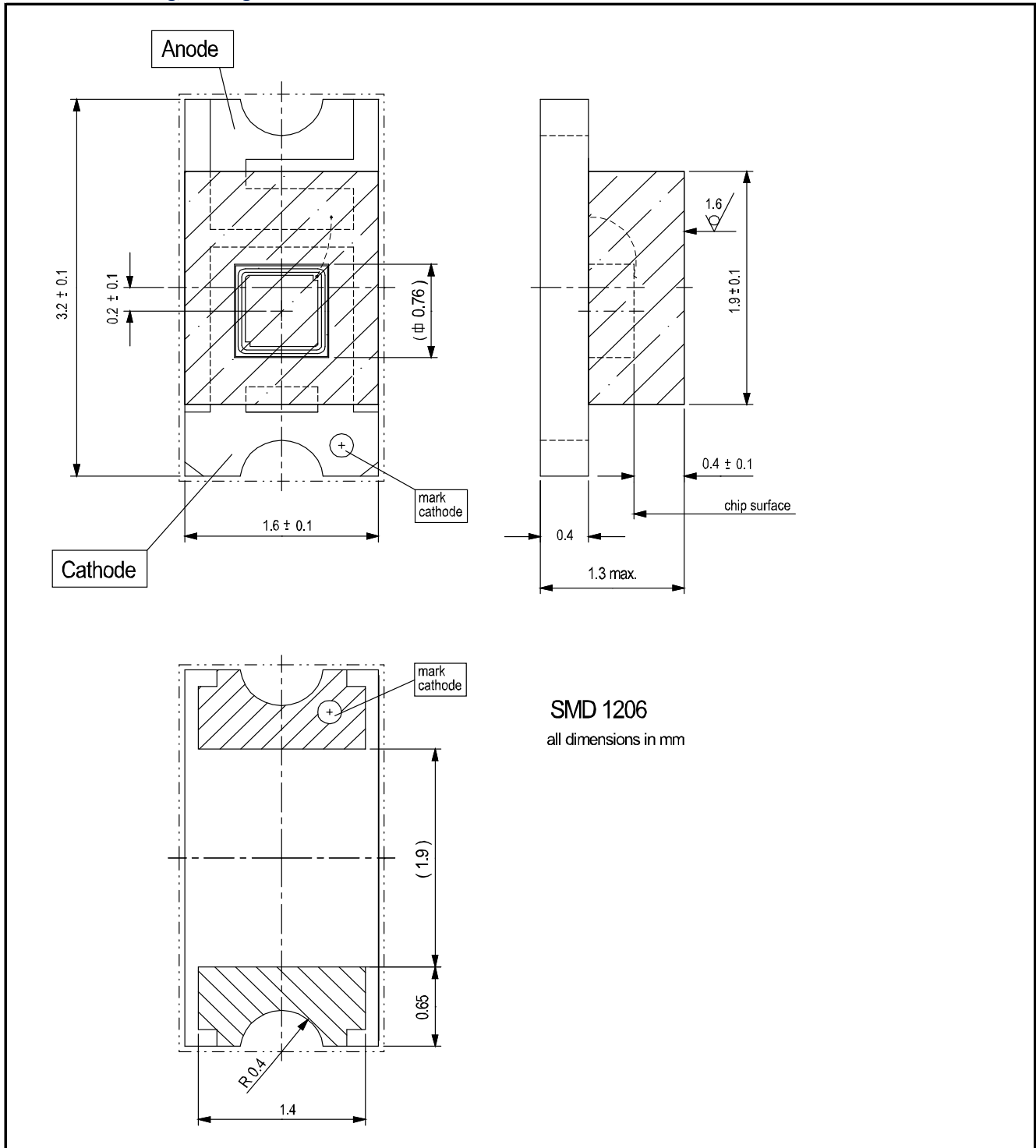
Dark current as fct of bias (23 °C)



Application hints:

Please refer to document "Instructions for handling and processing"

Technical Drawing, Package: SMD1206



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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Photodiodes](#) category:

Click to view products by [First Sensor](#) manufacturer:

Other Similar products are found below :

[LTR-526AD](#) [OED-SP-7L](#) [LTR-536AB](#) [LTR-743DBM1-TA](#) [67-21SYGC-S349-TR8](#) [SFH 2200 A01](#) [HFD3081-108-XBA](#) [BPW 34 S E9601](#)
[SFH 2713](#) [SFH 2703](#) [LTR-546AD](#) [BPV23FL](#) [BPW 34 FAS](#) [BPW 34 FS](#) [IG22X250S4I](#) [VTD205H](#) [VTD205KH](#) [VTP1220FBH](#) [VTP1232FH](#)
[VTP4085H](#) [SFH 2400](#) [OP913WSL](#) [OPF794](#) [PD70-01C/TR7](#) [LTR-536AD](#) [VTP8651H](#) [VTD206KH](#) [VTB1013H](#) [BPV23NF](#) [OP905](#) [LTR-](#)
[516AD](#) [BPW 34 FS-Z](#) [VTD34FH](#) [QSB34CGR](#) [SFH 2500 FA](#) [SFH 213 FA](#) [PD15-22C/TR8](#) [VEMD5510C](#) [SFH 2200](#) [VEMD5510CF](#)
[APS5130PD7C-P22](#) [SAH230M](#) [SAH230M2](#) [SAH500M2](#) [BP 104 FS](#) [BPV22F-AS12](#) [BPW 21](#) [BPW 34 SR-Z](#) [BPX 65](#) [HSDL-5400#011](#)