

Features

- InGaAs technology
- 0.7 mm² PIN detector
- High sensitivity up to 1700 nm
- Low dark current

Description

Low dark current InGaAs PIN photodiode with circular 0.7 mm² active area. Metal can type hermetic TO52 package with clear glass window.

Application

- Precision photometry
- Analytical instruments
- Medical equipment
- Pulsed light detector
- Eyesafe laser light detector

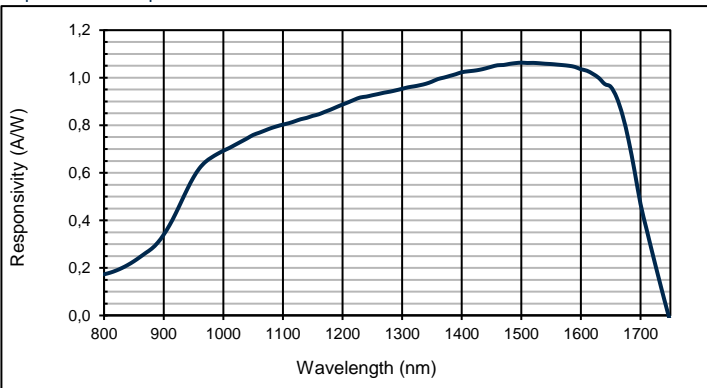
RoHS

2011/65/EU

Absolute maximum ratings

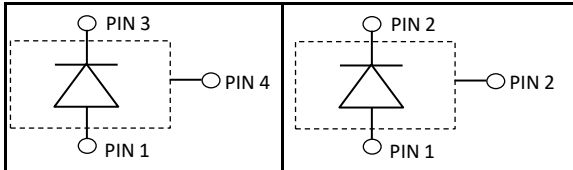
Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	85	°C
T _{OP}	Operating temp	-20	85	°C
V _{max}	Max reverse voltage		20	V
I _{PEAK}	Peak DC current		10	mA

Spectral response



Schematic 3001212

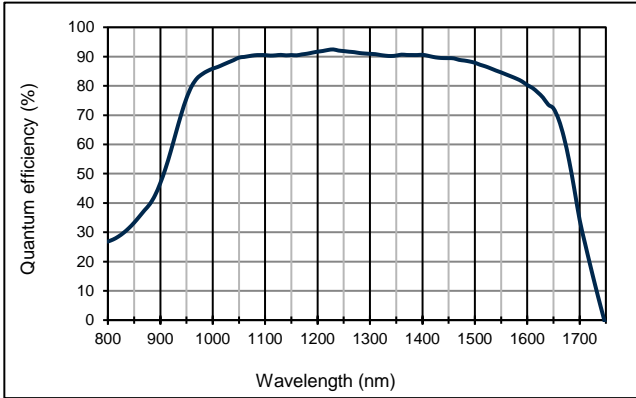
Schematic TO52S3



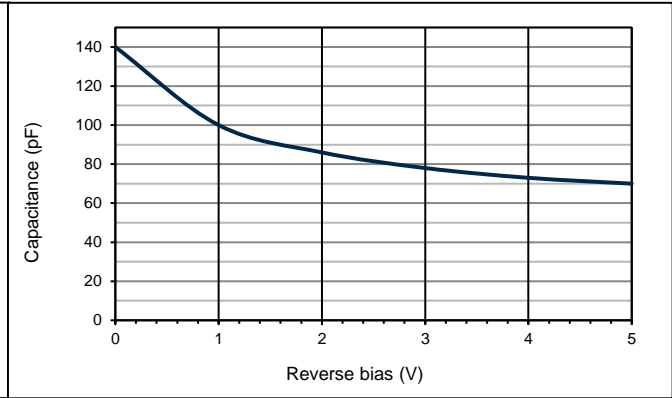
Electro-optical characteristics @ 23°C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 950			μm
	Active area		0.71			mm ²
I _D	Dark current	V _R = 5 V		1	10	nA
C	Capacitance	V _R = 0 V		140	200	pF
		V _R = 5 V		70	100	pF
	Responsivity	λ = 650 nm	0.02	0.05		A/W
		λ = 850 nm	0.10	0.20		A/W
		λ = 1310 nm	0.80	0.90		A/W
		λ = 1550 nm	0.85	0.95		A/W
t _R	Rise time	V _R = 5 V; λ = 1550 nm; R _L = 50 Ω		15		ns
	Shunt Resistance	V _R = 5 mV	25	80		MΩ
	Saturation power	V _R = 0 V; λ = 1550 nm; R _L = 50 Ω		-3		dbm
D*	Detectivity	V _R = 0 V; λ = 1550 nm; R _L = 50 Ω	2.5 E12	5 E12		Jones
V _{BR}	Breakdown voltage	I _R = 2 μA	20	30		V

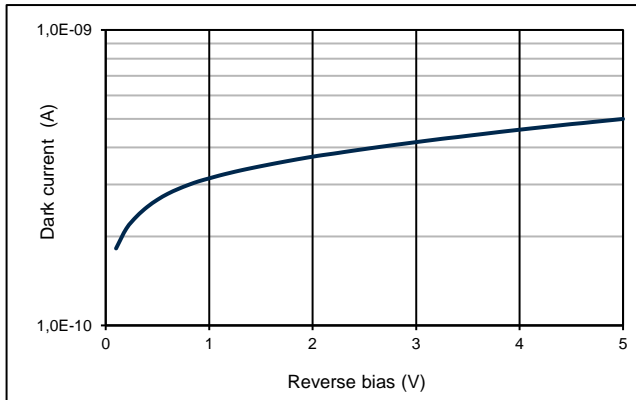
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)

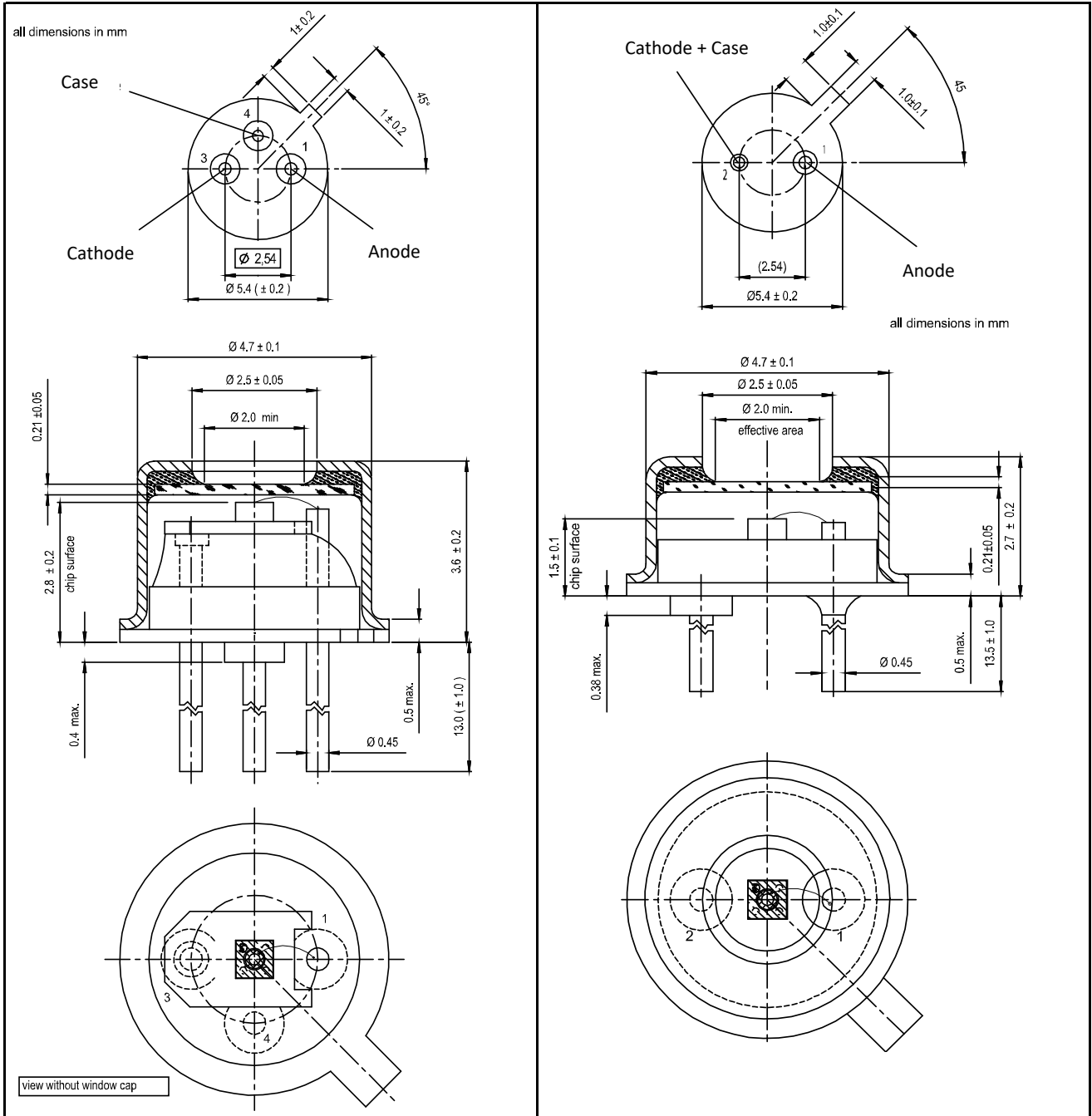


Dark current as fct of bias (23 °C)



Order number 3001212, Package: TO52S1

On request: Package: TO52S3



Package dimension:

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

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](#)