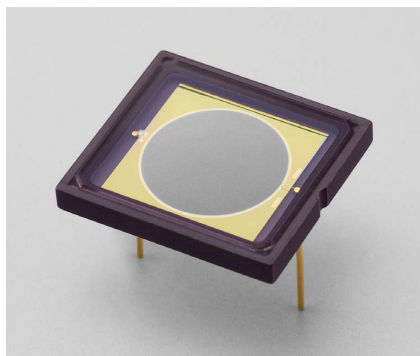


InGaAs PIN photodiode



G8370-10

Ceramic package with large active area ($\phi 10$ mm)

Features

- Large active area: $\phi 10$ mm
- High sensitivity: 0.95 A/W typ. ($\lambda=1.55$ μm)
- Low dark current
- Low PDL: 5 mdB typ., 10 mdB max.
- Photo response non-uniformity: ± 2 % typ.

Applications

- LD power monitor
- LD aging equipment

General / Absolute maximum ratings

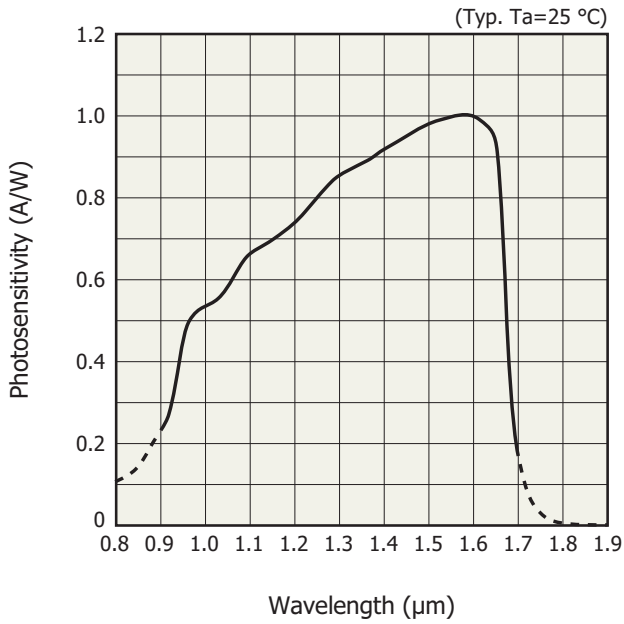
Parameter	Symbol	Value	Unit
Active area	-	$\phi 10$	mm
Reverse voltage	V_R Max.	1	V
Operating temperature	$T_{opr.}$	-25 to +70 *	$^{\circ}\text{C}$
Storage temperature	$T_{stg.}$	-25 to +70 *	$^{\circ}\text{C}$

* No condensation

Electrical and optical characteristics ($T_a=25$ $^{\circ}\text{C}$)

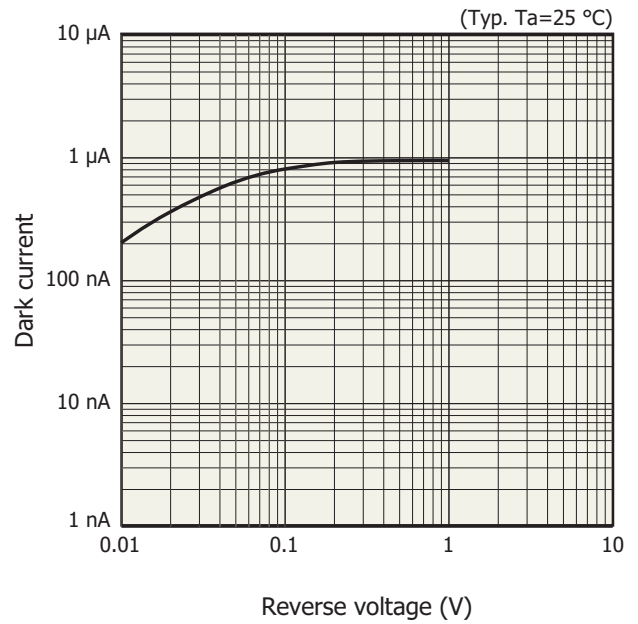
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	0.9 to 1.7	-	μm
Peak sensitivity wavelength	λ_p		-	1.55	-	μm
Photo sensitivity	S	$\lambda=1.3$ μm	0.8	0.85	-	A/W
		$\lambda=\lambda_p$	0.85	1.0	-	A/W
Dark current	I_D	$V_R=10$ mV	-	0.2	2	μA
Shunt resistance	Rsh	$V_R=10$ mV	5	50	-	k Ω
Terminal capacitance	Ct	$V_R=0$ V, f=1 MHz	-	20	-	nF
Cutoff frequency	f _c	$V_R=0$ V, $R_L=50$ Ω	-	100	-	kHz
Noise equivalent power	NEP	$\lambda=\lambda_p$	-	6×10^{-13}	-	W/Hz ^{1/2}
Detectivity	D*	$\lambda=\lambda_p$	-	1.5×10^{12}	-	cm ² ·Hz ^{1/2} /W
Photo response non-uniformity	PRNU	80 % of active area	-	± 2	-	%
PDL	-	$V_R=0$ V, $\lambda=1.55$ μm	-	5	10	mdB

Spectral response



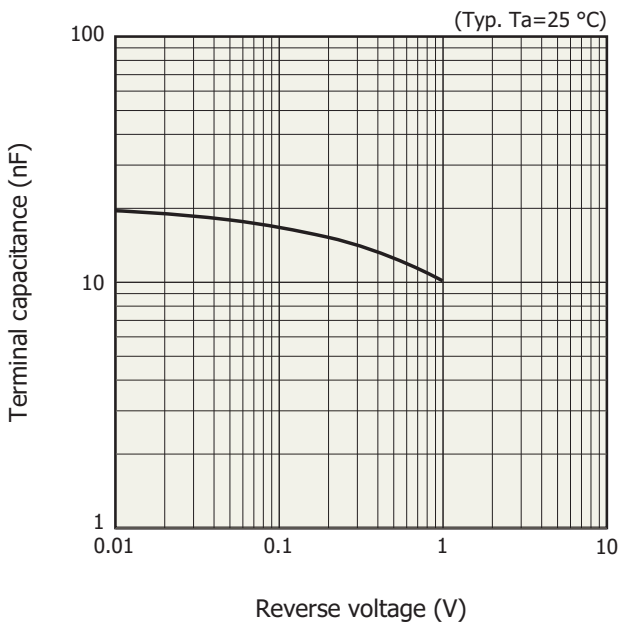
KIRDB0284EB

Dark current vs. reverse voltage



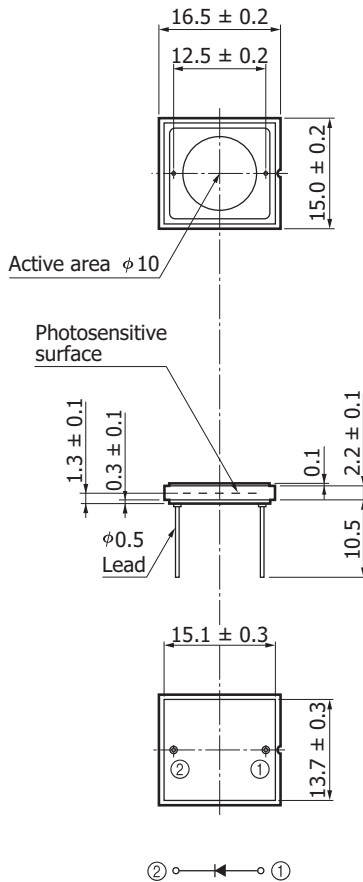
KIRDB0285EA

Terminal capacitance vs. reverse voltage



KIRDB0286EA

Dimensional outline (unit: mm)



KIRDA0167EB

Related information

www.hamamatsu.com/sp/ssd/doc_en.html

■ Precautions

- Disclaimer
- Metal, ceramic, plastic package products

■ Technical information

- Infrared detectors

Information described in this material is current as of January 2018.

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