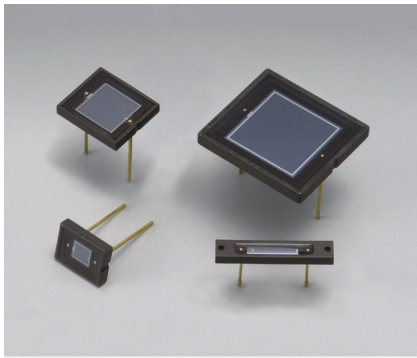


Si photodiodes

S12915 series



For visible to IR, general-purpose photometry

These Si photodiodes have high sensitivity in the visible range to near IR. They provide higher sensitivity than the S2387 series and can be used in high-humidity environments.

Features

- High sensitivity in visible to infrared range
- Low dark current
- High linearity

Applications

- Analytical equipment
- Optical measurement equipment, etc.

Structure / Absolute maximum ratings

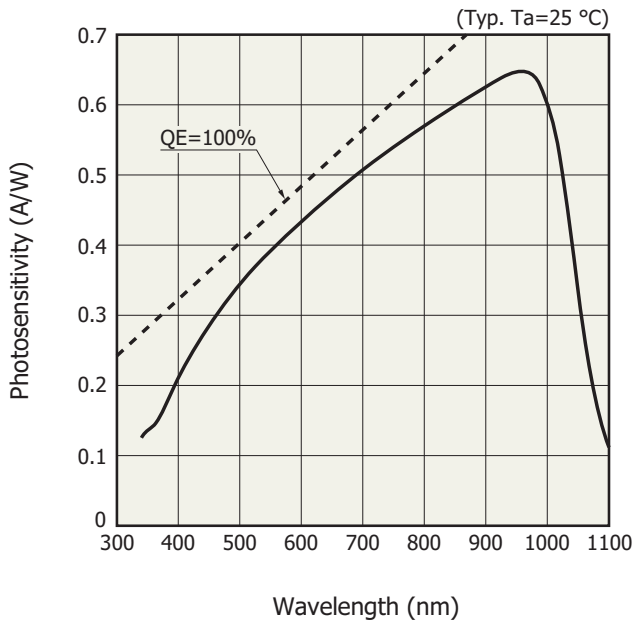
Type no.	Window material	Refractive index of window material	Package	Effective photosensitive area (mm ²)	Absolute maximum ratings		
					Reverse voltage V _R max (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
S12915-16R	Epoxy resin	1.53	ceramic	6.0	30	-20 to +60	-20 to +80
S12915-33R				5.7			
S12915-66R				33			
S12915-1010R				100			

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

Electrical and optical characteristics (Typ. T_a=25 °C, unless otherwise noted)

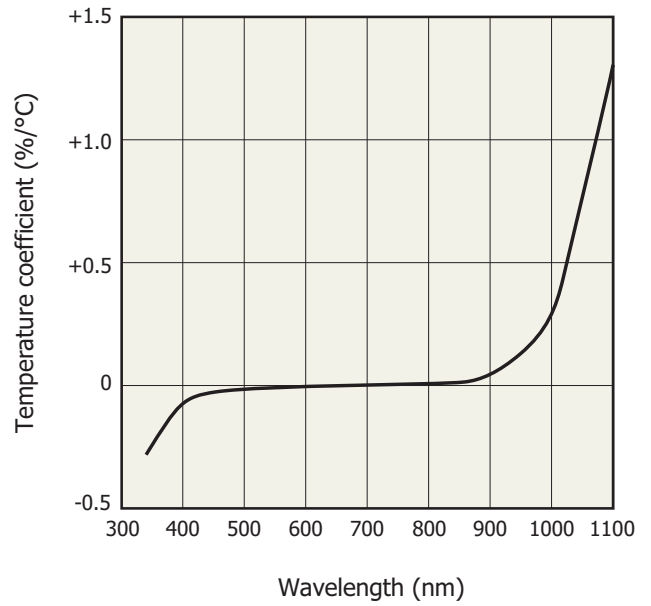
Type no.	Spectral response range λ (nm)	Peak sensitivity wavelength λ _p (nm)	Photosensitivity S λ=λ _p (A/W)	Short circuit current I _{sc} 100 lx		Dark current I _D V _R =10 mV Max. (pA)	Temp. coefficient of I _D T _{CID} (times/°C)	Rise time t _r V _R =0 V R _L =1 kΩ (μs)	Terminal capacitance C _t V _R =0 V f=10 kHz (pF)	Shunt resistance R _{sh} V _R =10 mV		Noise equivalent power NEP V _R =0 V λ=λ _p (W/Hz ^{1/2})	
				Min. (μA)	Typ. (μA)					Min. (GΩ)	Typ. (GΩ)		
S12915-16R	340 to 1100	960	0.64	4.6	5.8	5	1.12	1.8	740	2	50	9.0 × 10 ⁻¹⁶	
S12915-33R				5.0	5.7			1.6	680				
S12915-66R				26	33	50		9	4000	0.2	10		2.0 × 10 ⁻¹⁵
S12915-1010R				76	95	200		33	13000	0.05	5		2.8 × 10 ⁻¹⁵

Spectral response



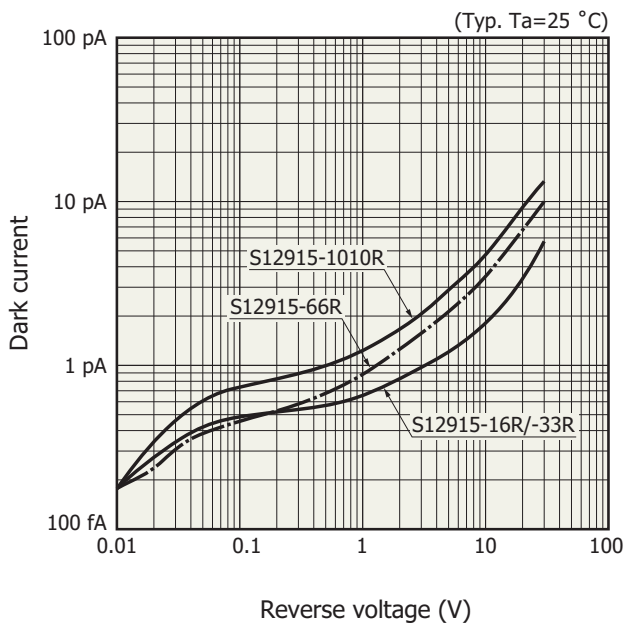
KSPDB0363EA

Photosensitivity temperature characteristics



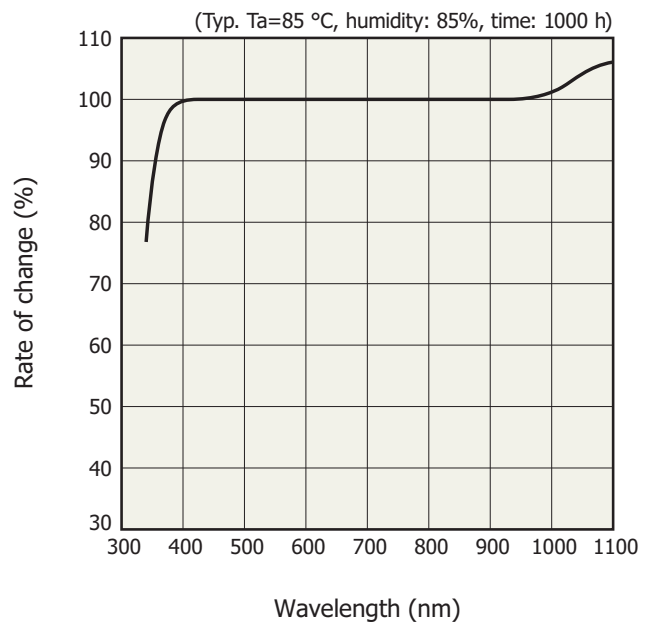
KSPDB0364EA

Dark current vs. reverse voltage



KSPDB0365EA

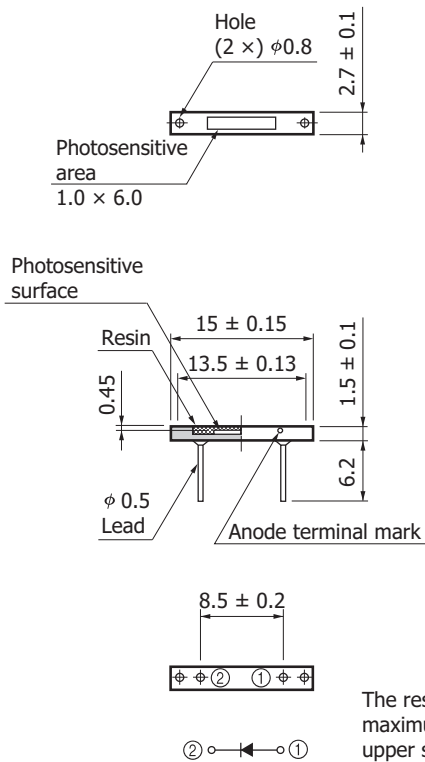
Changes to spectral sensitivity due high temperature and high humidity



KSPDB0366EA

Dimensional outlines (unit: mm)

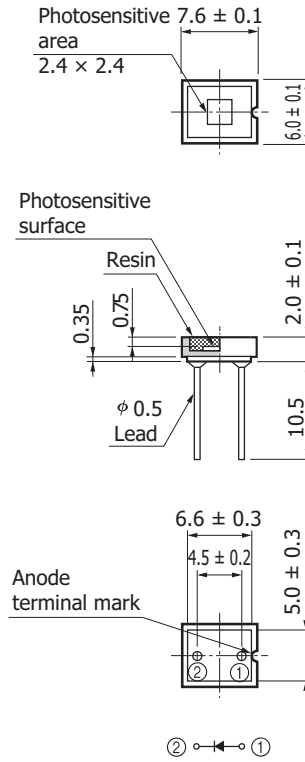
S12915-16R



The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

KSPDA0106EC

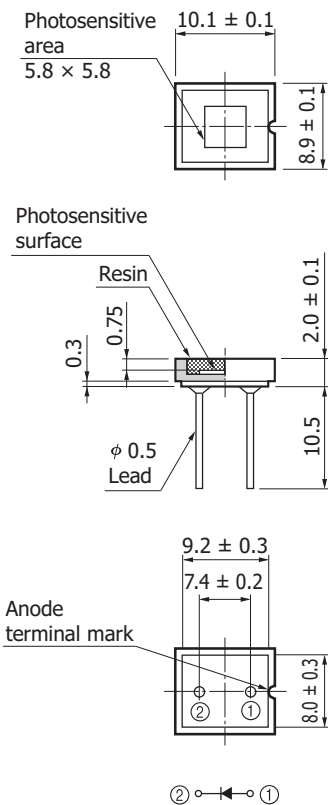
S12915-33R



The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

KSPDA0108EB

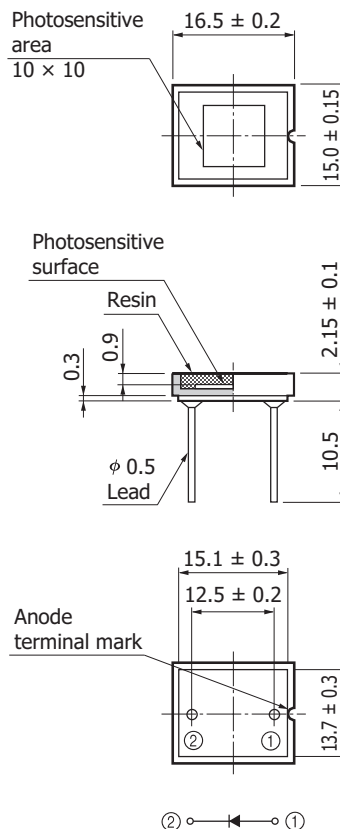
S12915-66R



The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

KSPDA0110EB

S12915-1010R



The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

KSPDA0112EB

Products corresponding to current products

Current product	Compatible products
S2387-16R	S12915-16R
S2387-33R	S12915-33R
S2387-66R	S12915-66R
S2387-1010R	S12915-1010R

Related information

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

Precautions

- Disclaimer
- Metal, ceramic, plastic package products

Technical information

- Si photodiode / Application circuit examples

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 勝特力電材超市-光復店 886-3-5729570
 勝特力電子(上海) 86-21-34970699
 勝特力電子(深圳) 86-755-83298787
<http://www.100y.com.tw>

Information described in this material is current as of January 2019.

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