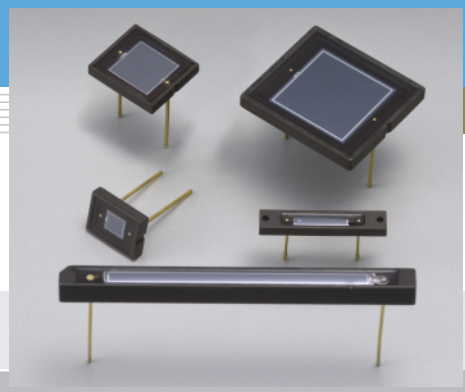


Si photodiode S2387 series

For visible to IR, general-purpose photometry



Features

- High sensitivity
- Low dark current
- High linearity

Applications

- Analytical equipment
- Optical measurement equipment, etc.

■ General ratings / Absolute maximum ratings

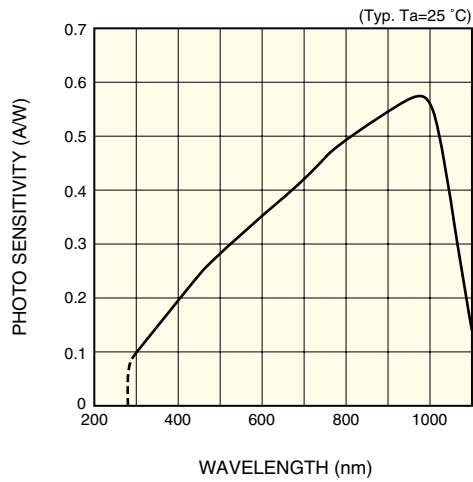
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
S2387-16R	①/R	2.7 × 15	1.1 × 5.9	6.4	30	-20 to +60	-20 to +80
S2387-33R	②/R	6 × 7.6	2.4 × 2.4	5.7			
S2387-66R	③/R	8.9 × 10.1	5.8 × 5.8	33			
S2387-1010R	④/R	15 × 16.5	10 × 10	100			
S2387-130R	⑤/R	3.0 × 40	1.2 × 29.1	35			

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

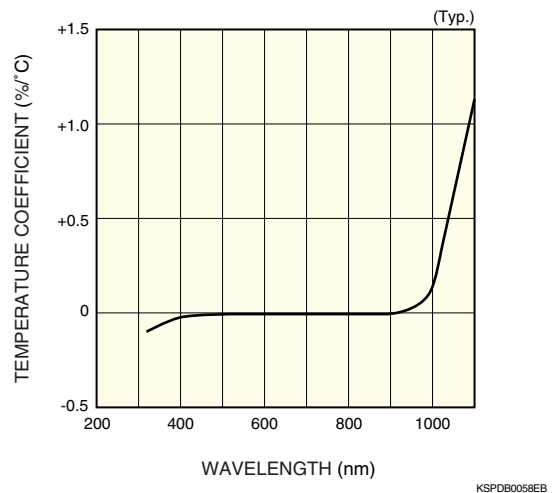
Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λ_p (nm)	Photo sensitivity S (A/W)			Short circuit current I _{sc} 100 lx		Dark current I _D VR=10 mV Max. (pA)	Temp. coefficient of I _D TC _{ID} (times/°C)	Rise time t _r VR=0 V RL=1 kΩ (μs)	Terminal capacitance C _t VR=0 V f=10 kHz (pF)	Shunt resistance R _{sh} VR=10 mV		NEP (W/Hz ^{1/2})
			λ_p	GaP LED 560 nm	He-Ne laser 633 nm	Min.	Typ.					Min.	Typ.	
						(μA)	(μA)					(GΩ)	(GΩ)	
S2387-16R	320 to 1100	960	0.58	0.33	0.37	4.4	6.0	5	1.12	1.8	730	2	50	9.9 × 10 ⁻¹⁶
S2387-33R						4.4	5.8							
S2387-66R						24	31	50						
S2387-1010R						68	91	200						
S2387-130R						25	32	100						

* Window material, R: resin coating

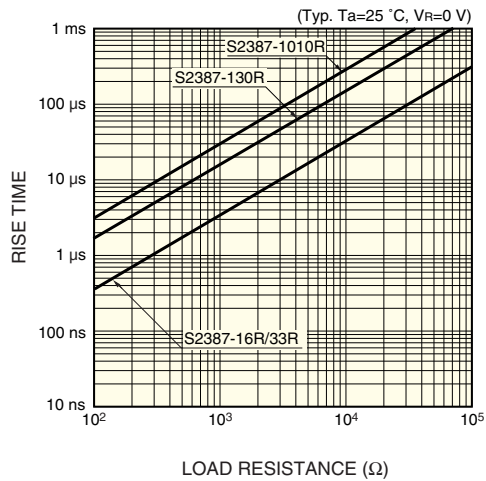
■ Spectral response



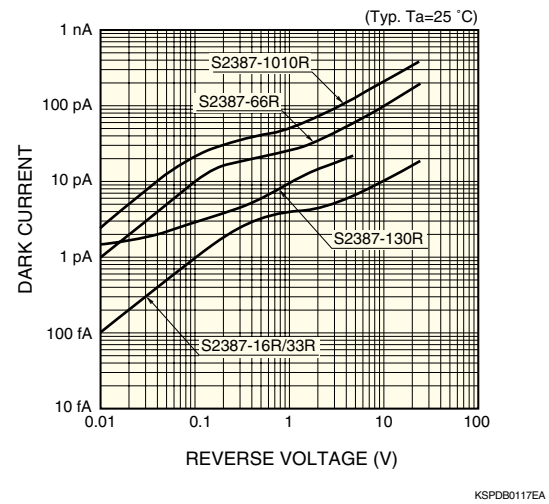
■ Photo sensitivity temperature characteristic



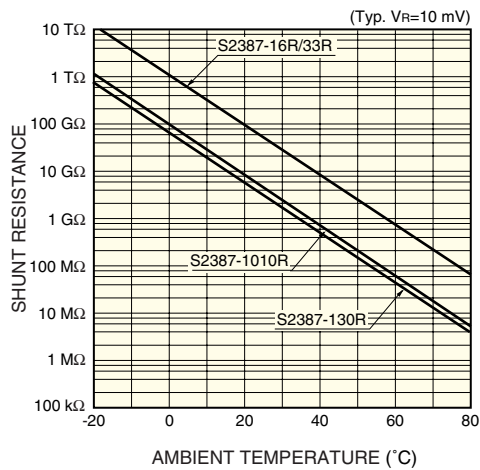
■ Rise time vs. load resistance



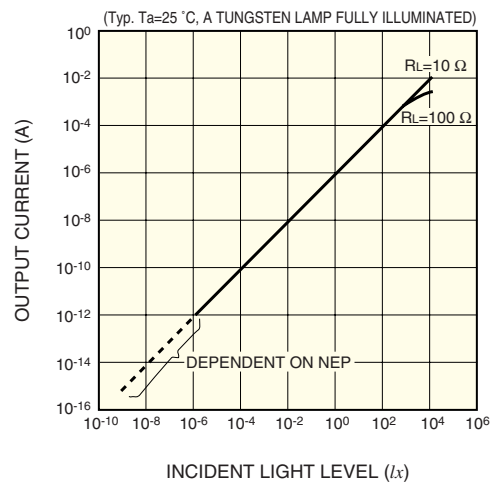
■ Dark current vs. reverse voltage



■ Shunt resistance vs. ambient temperature

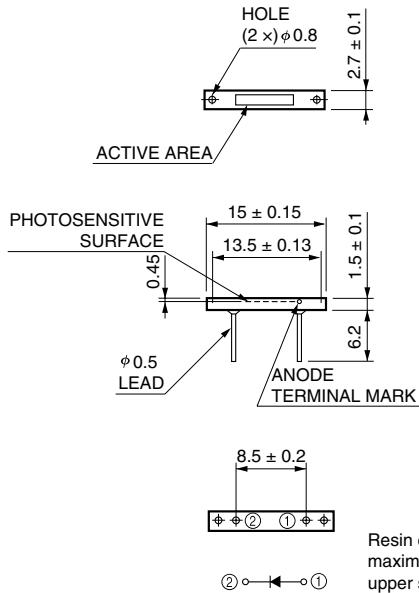


■ Photo sensitivity linearity (S2387-1010R)



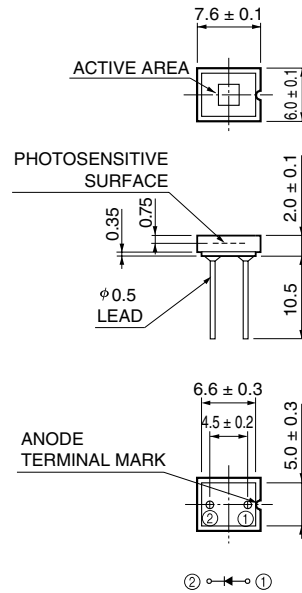
■ Dimensional outlines (unit: mm)

① S2387-16R



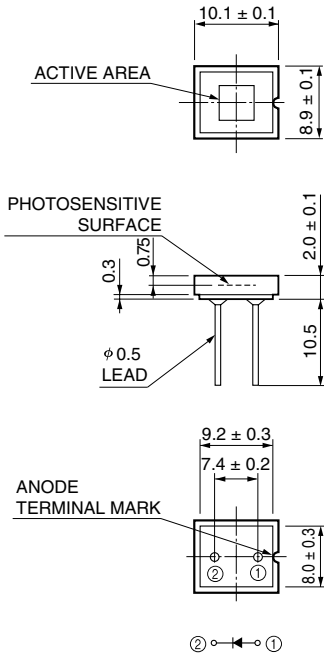
KSPDA0106EA

② S2387-33R



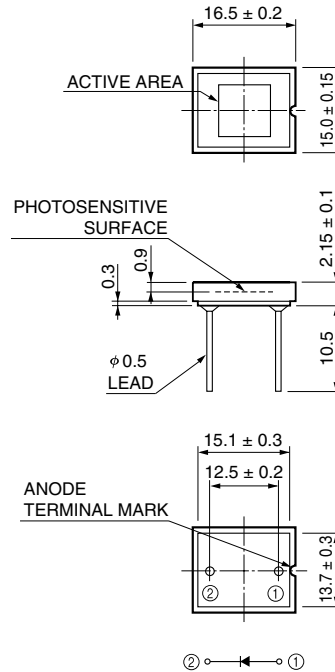
KSPDA0108EA

③ S2387-66R



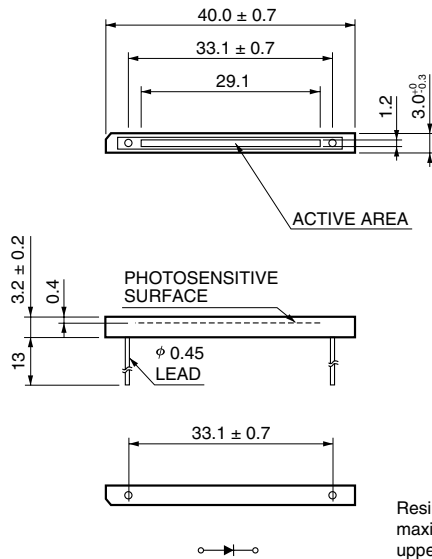
KSPDA0110EA

④ S2387-1010R



KSPDA0112EA

⑤ S2387-130R



Resin coating may extend a maximum of 0.1 mm above the upper surface of the package.

KSPDA0117EA

HAMAMATSU

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741

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