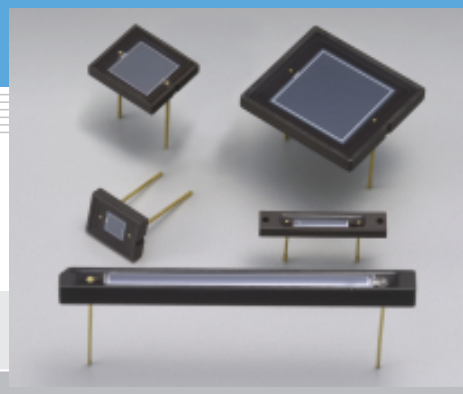


Si photodiode S2387 series

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

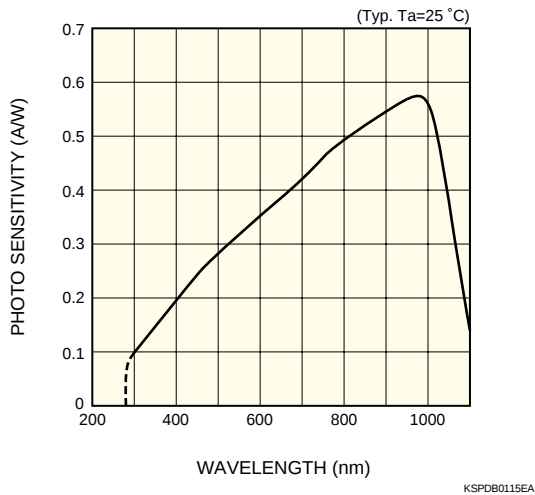
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
S2387-16R	①/R	2.7 × 15	1.1 × 5.9	6.4	30	-20 to +60	-20 to +80
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)

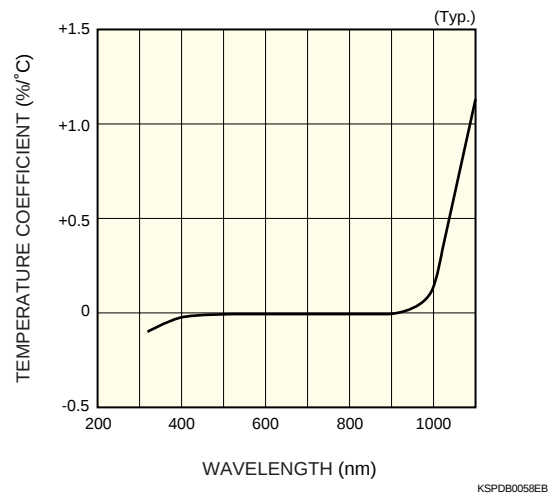
Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λ_p (nm)	Photo sensitivity S (A/W)			Short circuit current I _{sc} 100 lx		Dark current I _D V _R =10 mV Max. (pA)	Temp. coefficient of I _D T _{CID} (times/°C)	Rise time t _r V _R =0 V R _L =1 kΩ (μs)	Terminal capacitance C _t V _R =0 V f=10 kHz (pF)	Shunt resistance R _{sh} V _R =10 mV		NEP V _R =0 V λ=λ _p (W/Hz ^{1/2})
			λ _p	GaP LED 560 nm	He-Ne laser 633 nm	Min. (μA)	Typ. (μA)					Min. (GΩ)	Typ. (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		10	4300	0.2	10	2.2 × 10 ⁻¹⁵
S2387-1010R						68	91	200		33	12000	0.05	5	3.1 × 10 ⁻¹⁵
S2387-130R						25	32	100		11	5000	0.1	20	1.6 × 10 ⁻¹⁵

* Window material, R: resin coating

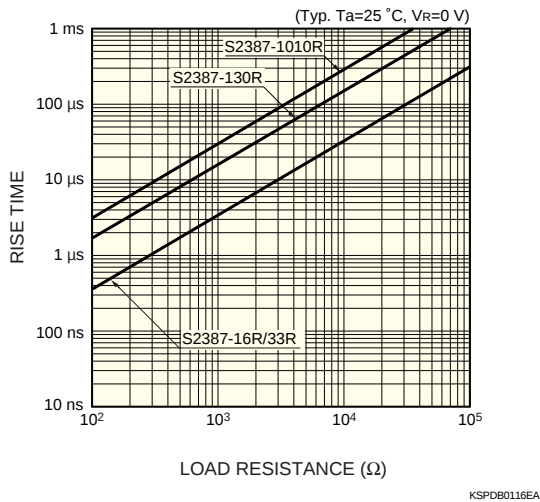
■ Spectral response



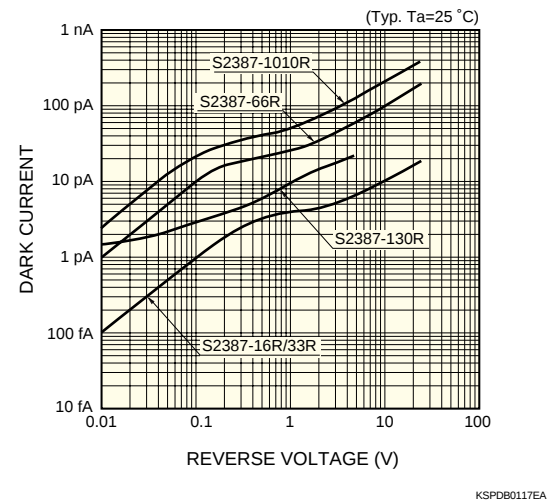
■ Photo sensitivity temperature characteristic



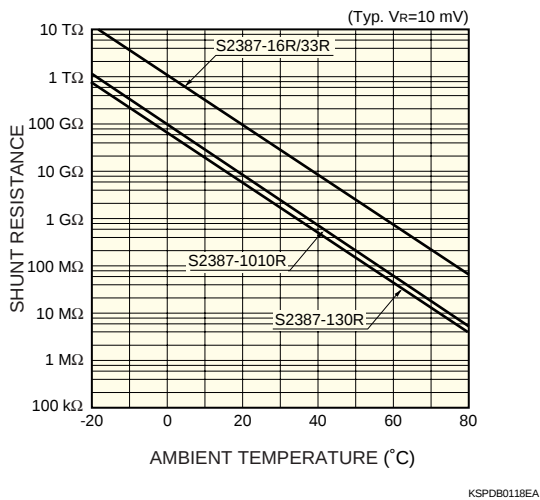
■ Rise time vs. load resistance



■ Dark current vs. reverse voltage

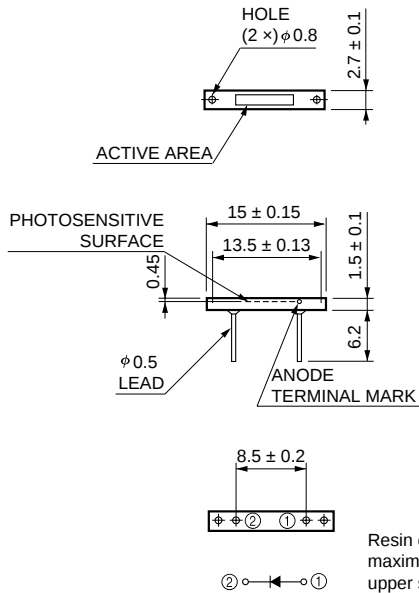


■ Shunt resistance vs. ambient temperature



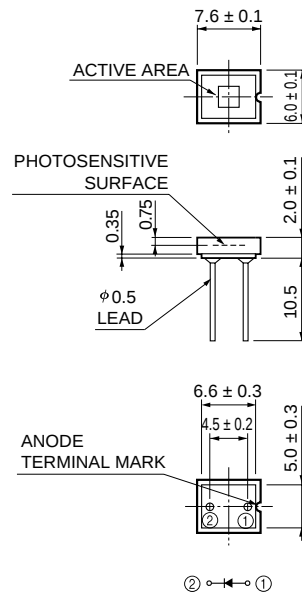
■ Dimensional outlines (unit: mm)

① S2387-16R



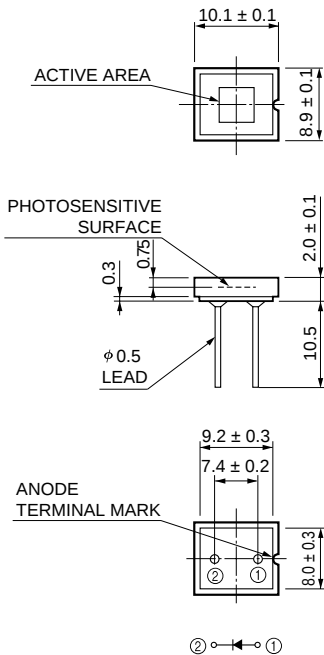
KSPDA0106EA

② S2387-33R



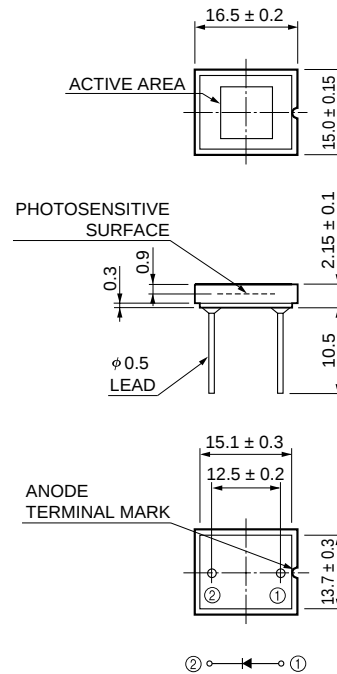
KSPDA0108EA

③ S2387-66R



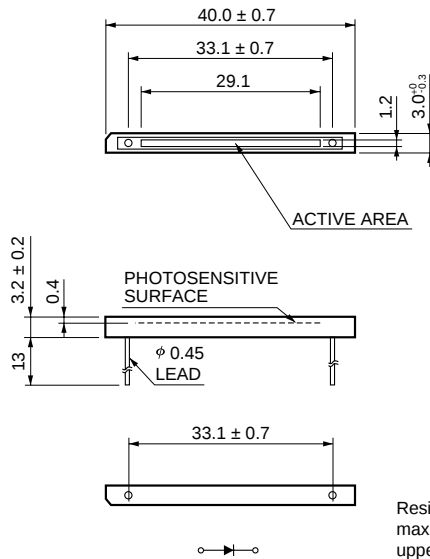
KSPDA0110EA

④ S2387-1010R



KSPDA0112EA

⑤ S2387-130R



KSPDA0117EA

HAMAMATSU

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