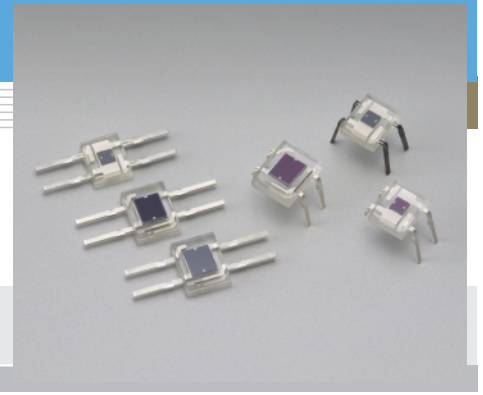


Si photodiode S5493-01, etc.

Photodiodes molded into clear plastic packages



These are Si photodiodes molded into clear plastic packages.

Spectral response characteristics for these Si photodiodes can be selected to meet your application, from among the visible range, visible to near IR range, and visible to infrared range. Two active areas of 1.3×1.3 mm and 2.4×2.8 mm are also available.

S5493-01 and S5627-01 provide a spectral response characteristic similar to the visible range sensitivity without using visual-compensated filters.

Features

- S5493-01, S5627-01: Visible range (Filterless type)
- S4797-01, S6931 : Visible to near IR range
- S2833-01, S4011-02: Visible to infrared range

Applications

- Exposure meter
- Illuminometer
- Camera auto exposure
- Stroboscope light control
- Copier
- Display light control
- Optical switch

General ratings / Absolute maximum ratings

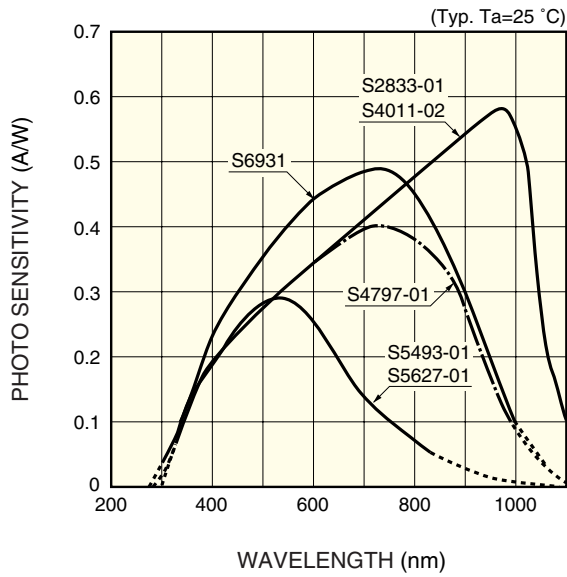
Type No.	Dimensional outline/ Window material *	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
				Reverse voltage V _R Max. (V)	Operating temperature T _{op} (°C)	Storage temperature T _{stg} (°C)
S5493-01	①/R	2.4 × 2.8	6.6	10	-25 to +85	-40 to +100
S5627-01	②/R	1.3 × 1.3	1.6			
S6931	③/R	2.4 × 2.8	6.6			
S4797-01	④/R	1.3 × 1.3	1.6			
S2833-01	⑤/R	2.4 × 2.8	6.6			
S4011-02	⑥/R	1.3 × 1.3	1.6			

* Window material R: clear resin coating

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

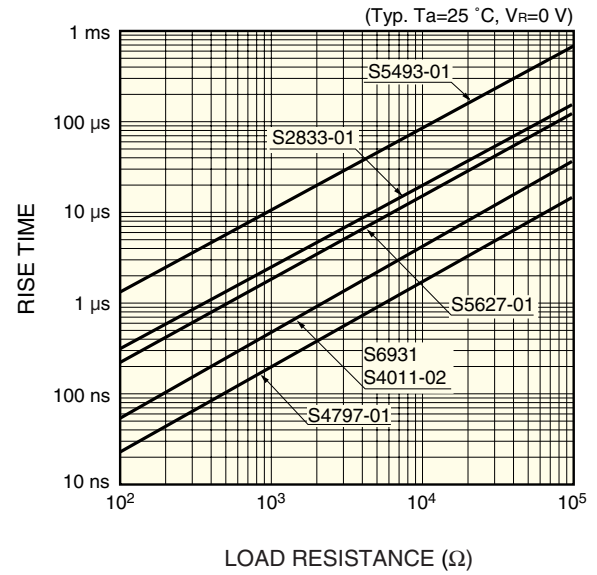
Type No.	Spectral response range λ	Peak sensitivity wavelength λ_p	Photo sensitivity S (A/W)			Infrared sensitivity ratio	Short circuit current Isc 100 lx	Temp. coefficient of Isc	Dark current Id VR=1 V Max.	Temp. coefficient of Id TCId	Rise time tr VR=0 V RL=1 kΩ	Terminal capacitance Ct VR=0 V f=10 kHz	Shunt resistance Rsh VR=10 mV		
			λ_p	GaP LED	He-Ne laser								Min. (GΩ)	Typ. (GΩ)	
	(nm)	(nm)		560 nm	633 nm	(%)	(μA)	(%/°C)	(pA)	(times/°C)	(μs)	(pF)			
S5493-01	320 to 840	540	0.3	0.28	0.2	35	1.0	0.25	100	1.13	10	3000	0.1	1	
S5627-01							0.25		50		2	700	0.5	5	
S6931	320 to 1000	720	0.48	0.4	0.45	-	4.2	0.1	20	1.12	0.5	200	10	50	
S4797-01			0.4		0.37		1.2				0.2	50			
S2833-01	320 to 1100	960	0.58	0.33	0.38		6.5		10		2.5	700			
S4011-02							1.9				0.5	200		250	

■ Spectral response



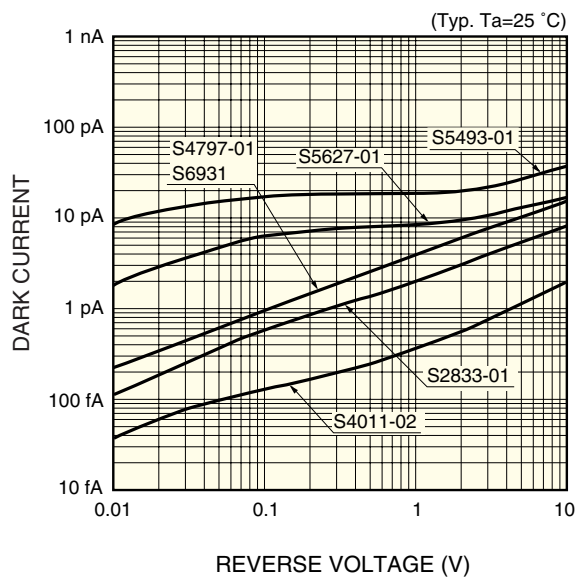
KSPDB0129EA

■ Rise time vs. load resistance



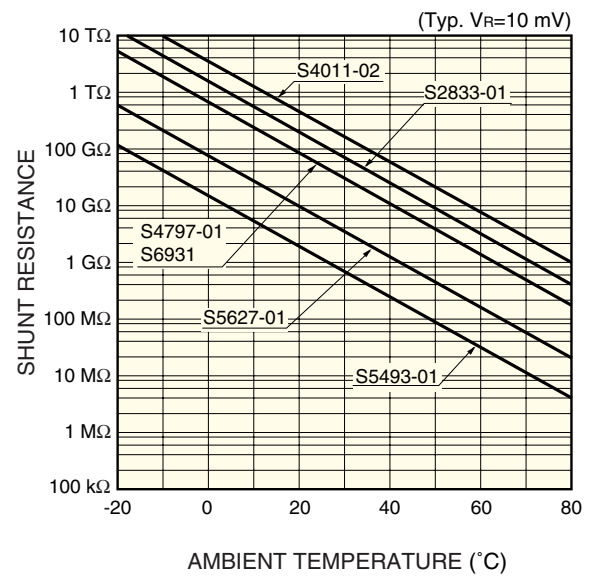
KSPDB0130EB

■ Dark current vs. reverse voltage



KSPDB0131EA

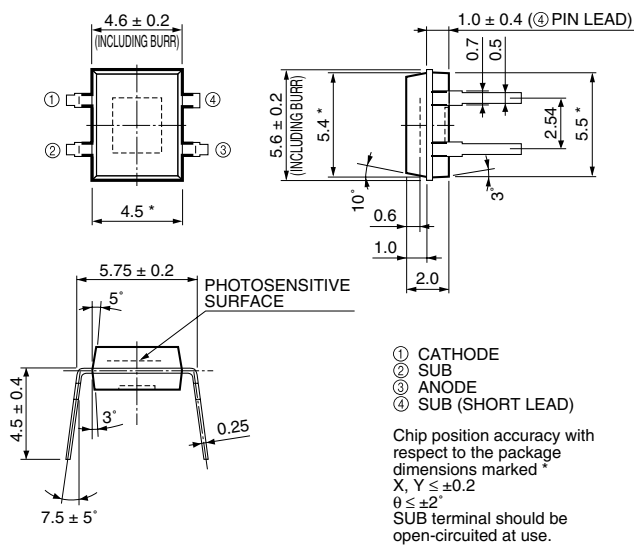
■ Shunt resistance temperature characteristics



KSPDB0132EA

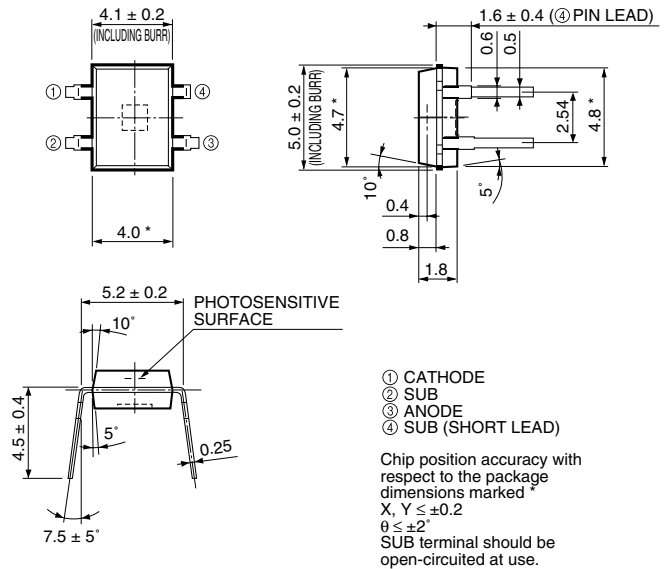
■ Dimensional outlines (unit: mm, tolerance unless otherwise noted: ± 0.1 mm)

① S5493-01



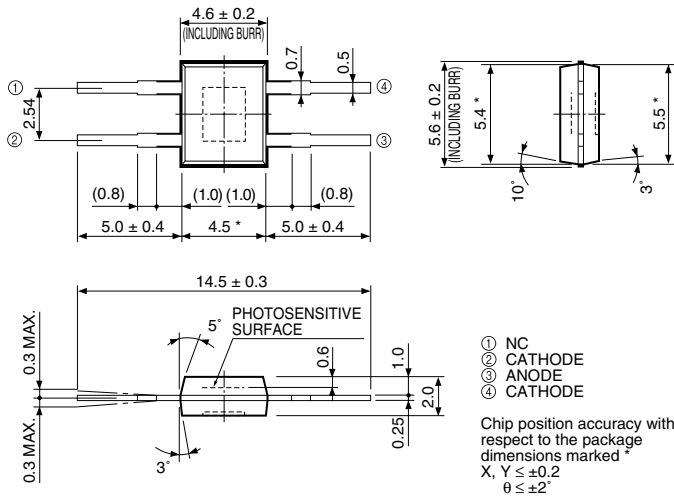
KSPDA0118EA

② S5627-01



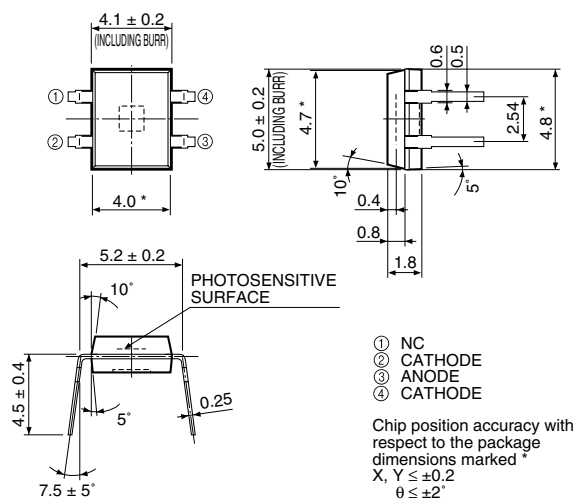
KSPDA0119EA

③ S6931



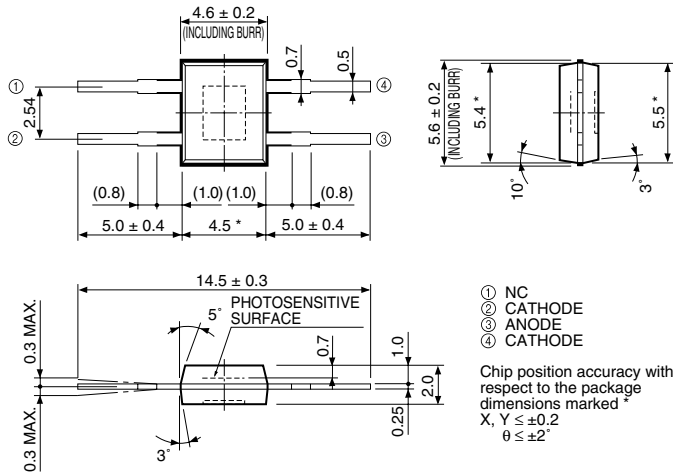
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④ S4797-01



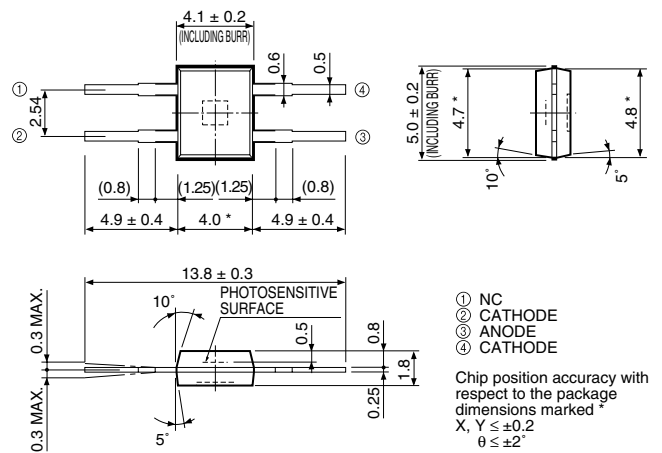
KSPDA0121EA

⑤ S2833-01



KSPDA0123EA

⑥ S4011-02



KSPDA0060EA

HAMAMATSU

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