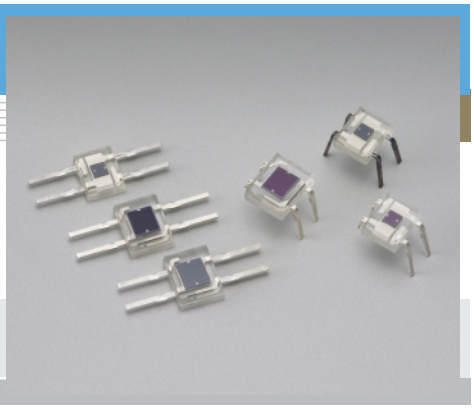
Si photodiode
S5493-01, etc.



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 Topr (°C)	Storage temperature Tstg (°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. Ta=25 °C, unless otherwise noted)

Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λp (nm)	Photo sensitivity S (A/W)			Infrared sensitivity ratio (%)	Short circuit current Isc 100 lx (μA)	Temp. coefficient of Isc (%/°C)	Dark current I_D V_R=1 V Max. (pA)	Temp. coefficient of I_D T_{CID} (times/°C)	Rise time tr V_R=0 V R_L=1 kΩ (μs)	Terminal capacitance Ct V_R=0 V f=10 kHz (pF)	Shunt resistance Rsh V_R=10 mV	
			λp	GaP LED 560 nm	He-Ne laser 633 nm								Min. (GΩ)	Typ. (GΩ)
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	0.33	0.37		1.2				0.2	50		
S2833-01	320 to 1100	960	0.58		0.38		6.5		10		2.5	700		100
S4011-02							1.9				0.5	200		250

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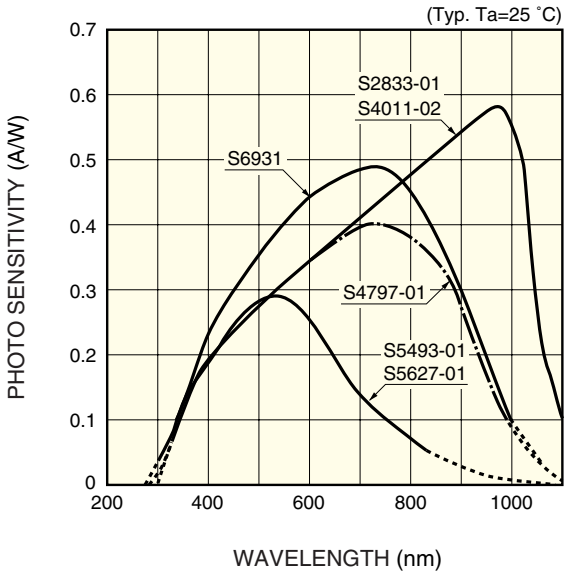
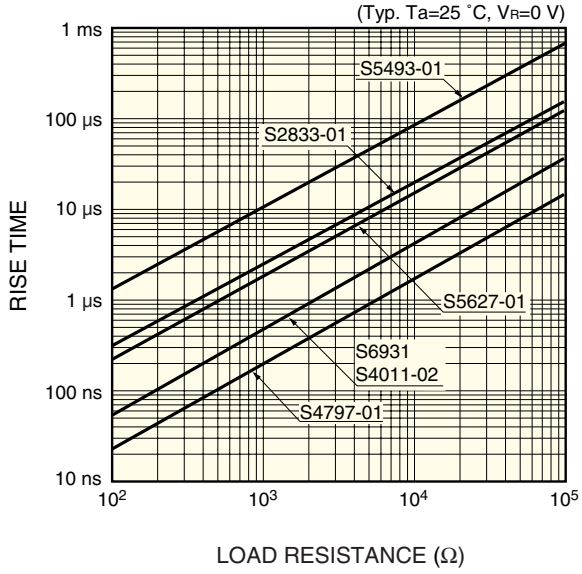
■ Spectral response



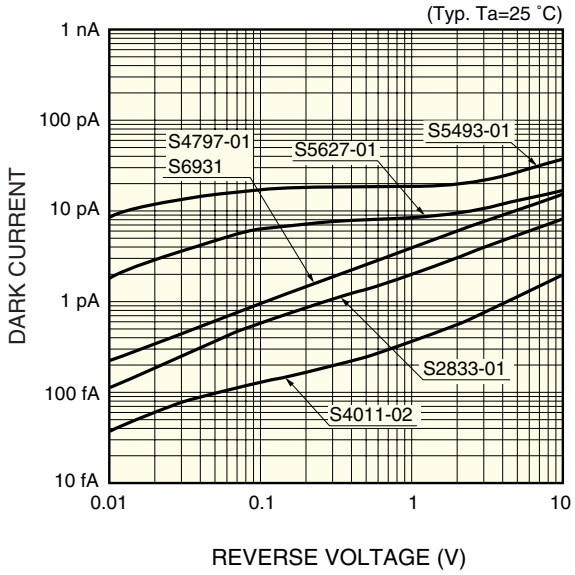
KSPDB0129EA

■ Rise time vs. load resistance



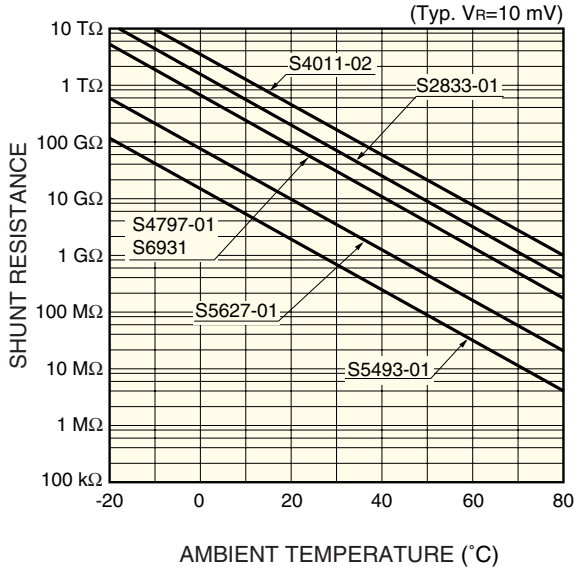
KSPDB0130EB

■ Dark current vs. reverse voltage



KSPDB0131EA

■ Shunt resistance temperature characteristics



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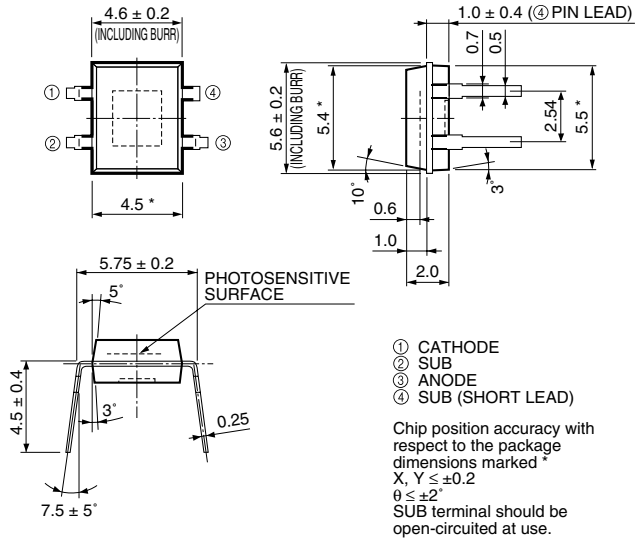
■ Dimensional outlines (unit: mm, tolerance unless otherwise noted: ±0.1 mm)

① S5493-01

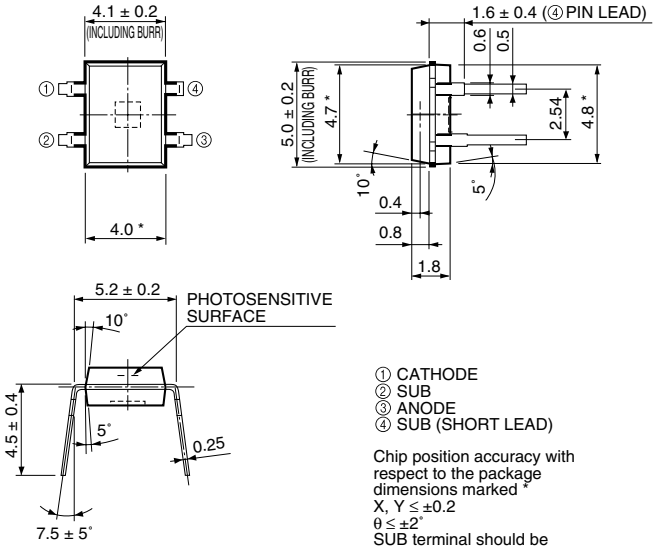


① CATHODE
② SUB
③ ANODE
④ SUB (SHORT LEAD)

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°
SUB terminal should be open-circuited at use.

KSPDA0118EA

② S5627-01

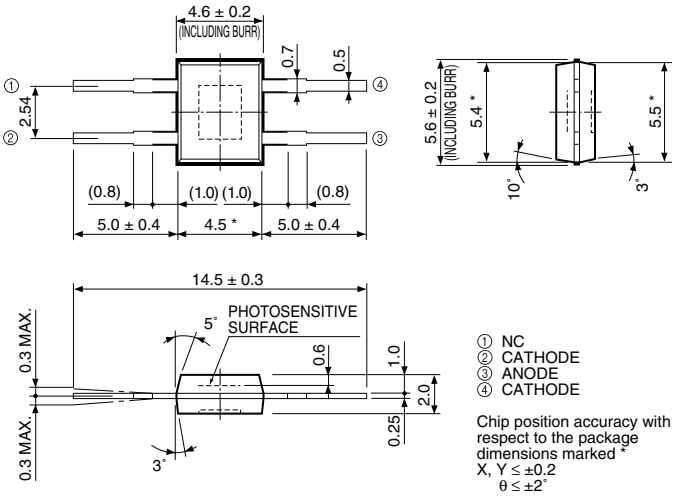


① CATHODE
② SUB
③ ANODE
④ SUB (SHORT LEAD)

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°
SUB terminal should be open-circuited at use.

KSPDA0119EA

③ S6931

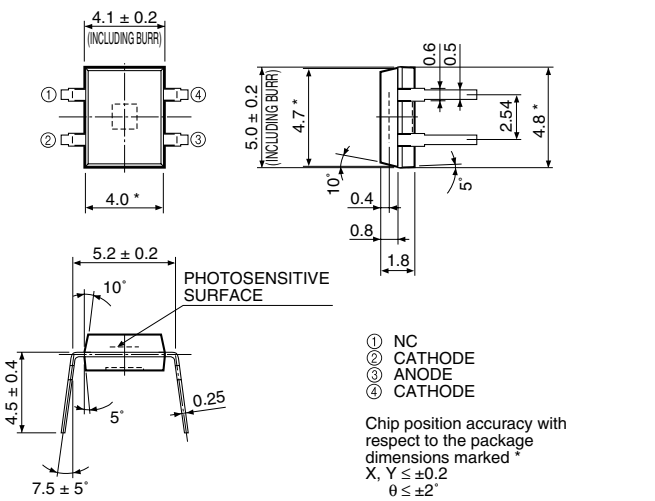


① NC
② CATHODE
③ ANODE
④ CATHODE

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°

KSPDA0122EA

④ S4797-01

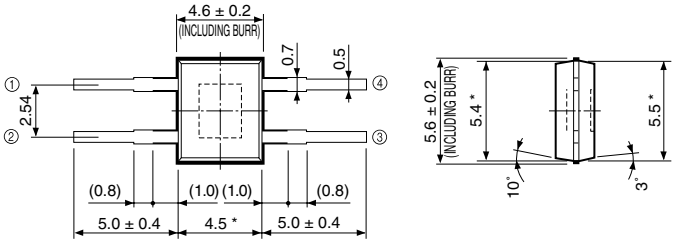


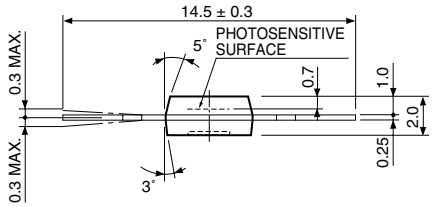
① NC
② CATHODE
③ ANODE
④ CATHODE

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°

KSPDA0121EA

⑤ S2833-01



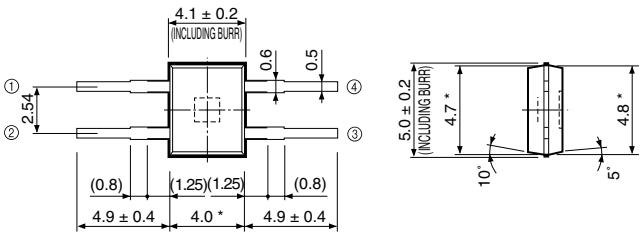


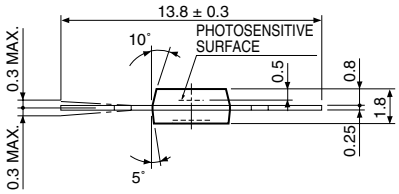
① NC
② CATHODE
③ ANODE
④ CATHODE

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°

KSPDA0123EA

⑥ S4011-02





① NC
② CATHODE
③ ANODE
④ CATHODE

Chip position accuracy with respect to the package dimensions marked *
X, Y ≤ ±0.2
θ ≤ ±2°

KSPDA0060EA

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