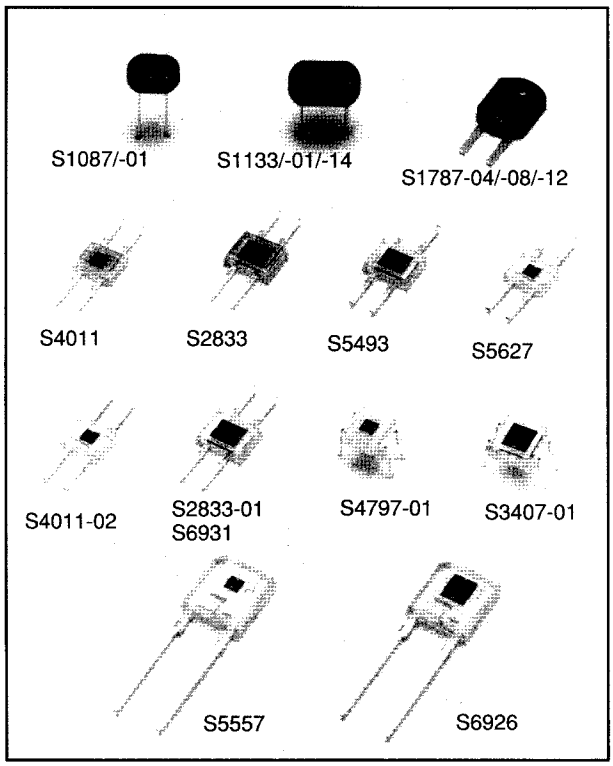
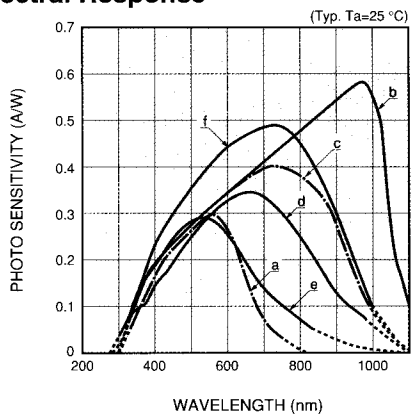
Si Photodiodes (Visible/Visible to IR Range, for General Photometry)

Type No.	Dimensional Outline (P.50 to 53)/ Window Material *1	Active Area Size (mm)	Effective Active Area (mm^2)	Spectral Response Range λ (nm)	Peak Sensitivity Wavelength λp (nm)	Photo Sensitivity S (A/W) λp	GaP LED 560 nm	He-Ne Laser 633 nm	GaAs LED 930 nm
Ceramic Package									
S1087	㊵/V	1.3 × 1.3	1.6	320 to 730 a	560	0.3	0.3	0.19	–
S1133	㊶/V	2.4 × 2.8	6.6						
S1087-01	㊷/R	1.3 × 1.3	1.6	320 to 1100 b	960	0.58	0.33	0.38	0.55
S1133-01	㊸/R	2.4 × 2.8	6.6						
S1133-14				320 to 1000 c	720	0.4		0.37	0.2
Plastic Package									
S1787-04	㊺/V	2.4 × 2.8	6.6	320 to 730 a	560	0.3	0.3	0.19	—
S1787-08	㊺/R			320 to 1100 b	960	0.58	0.33	0.38	0.55
S1787-12	㊺/I			320 to 1000 d	650	0.35	0.3	0.34	0.1
S4011	㊻/V	1.3 × 1.3	1.6	320 to 730 a	560	0.3	0.3	0.19	–
S2833	㊼/V	2.4 × 2.8	6.6						
S5493	㊽/R			320 to 840 e	540		0.28	0.2	–
S5627	㊾/R								
S4011-02	㊿/R	1.3 × 1.3	1.6	320 to 1100 b	960	0.58	0.33	0.38	0.55
S5557	(60)/R								
S2833-01	(51)/R	2.4 × 2.8	6.6						
S4797-01	(52)/R	1.3 × 1.3	1.6	320 to 1000 c	720	0.4		0.37	0.2
S3407-01	(53)/R	2.4 × 2.8	6.6						
S6926	(60)/R								
S6931	(51)/R			320 to 1000 f		0.48	0.4	0.45	0.24

*1: Window material, R: resin coating, V: visual-compensation filter, I: infrared-cutting filter

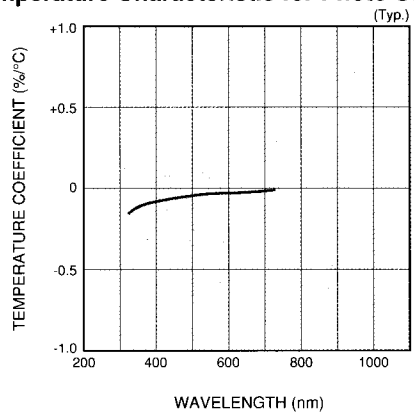


● Spectral Response



KSPDB0060EA

● Temperature Characteristic for Photo Sensitivity (S1087)



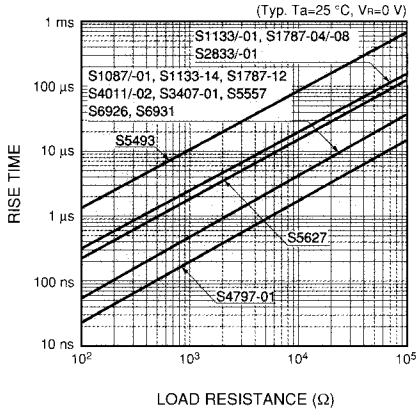
KSPDB0063EB

(Unless otherwise noted, Typ. Ta=25 °C)

Infrared Sensitivity Ratio (%)	Short Circuit Current Isc 100 lx (μA)	Temperature Coefficient of Isc (%/°C)	Dark Current ID VR=1 V Max. (pA)	Temperature Coefficient of ID TCID (times/°C)	Rise Time tr VR=0 V RL=1 kΩ (μs)	Terminal Capacitance Ct VR=0 V f=10 kHz (pF)	Shunt Resistance Rsh VR=10 mV Min. (GΩ)	Shunt Resistance Rsh VR=10 mV Typ. (GΩ)	Absolute Maximum Ratings: Reverse Voltage VR Max. (V)	Absolute Maximum Ratings: Operating Temperature Topr (°C)	Absolute Maximum Ratings: Storage Temperature Tstg (°C)	Type No.
10	0.16	−0.01	10	1.12	0.5	200	10	250	10	−10 to +60	−20 to +70	S1087
	0.65				2.5	700		100				S1133
–	1.3	0.1			0.5	200		250				S1087-01
	5.6				2.5	700		100				S1133-01
	3.4		20		0.5	200		50				S1133-14
10	0.65	−0.01	10	1.12	2.5	700	10	100	10	−10 to +60	−20 to +70	S1787-04
–	5.6	0.1										S1787-08
	2.3		20		0.5	200	1	10				S1787-12
12 *2	0.26	−0.01	10	1.12	0.5	200	10	250	10	−10 to +60	−20 to +70	S4011
13 *2	0.95				2.5	700		100				S2833
35	1.0	0.25	100	1.13	10	3000	0.1	1				S5493
	0.25		50		2	700	0.5	5				S5627
–	1.9	0.1	10	1.12	0.5	200	10	250		−25 to +85	−40 to +100	S4011-02
	1.9		100									S5557
	6.5		10		2.5	700		100				S2833-01
	1.2				0.2	50						S4797-01
	3.9		20		0.5	200		50				S3407-01
												S6926
	4.2											S6931

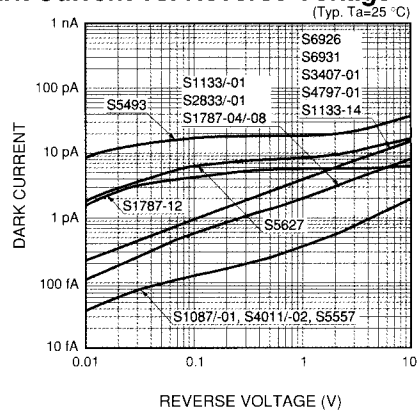
*2: Package is light-shielded except the filter

● Rise Time vs. Load Resistance



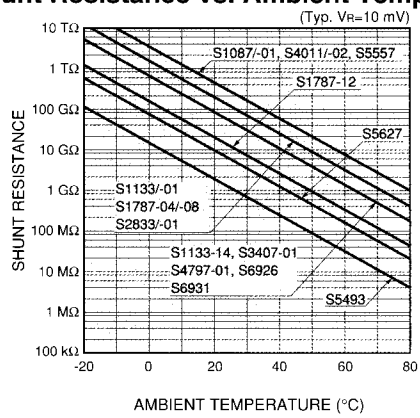
KSPDB0061ED

● Dark Current vs. Reverse Voltage



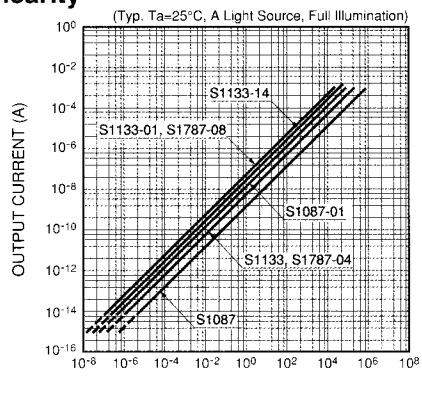
KSPDB0062EC

● Shunt Resistance vs. Ambient Temperature



KSPDB0064ED

● Linearity



KSPDB0065EB