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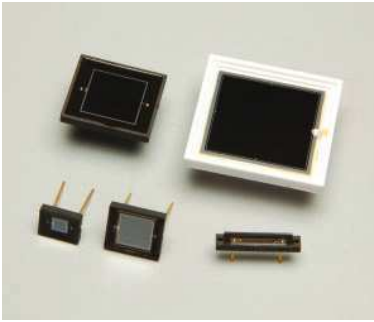
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Si photodiodes

S1337 series



For UV to IR, precision photometry

Features

- High UV sensitivity: QE 75% ($\lambda=200$ nm)
- Low capacitance

Applications

- Analytical equipment
- Optical measurement equipment

Structure / Absolute maximum ratings

Type No.	Window material	Package (mm)	Photosensitive area size (mm)	Effective photosensitive area (mm ²)	Absolute maximum ratings		
					Reverse voltage V_R max (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)
S1337-16BQ	Quartz	2.7 × 15	1.1 × 5.9	5.9	5	-20 to +60	-20 to +80
S1337-16BR	Resin potting						
S1337-33BQ	Quartz	6 × 7.6	2.4 × 2.4	5.7			
S1337-33BR	Resin potting						
S1337-66BQ	Quartz	8.9 × 10.1	5.8 × 5.8	33			
S1337-66BR	Resin potting						
S1337-1010BQ	Quartz	15 × 16.5	10 × 10	100			
S1337-1010BR	Resin potting						
S1337-21	Unsealed	25.5 × 25.5	18 × 18	324	0 to +60	0 to +80	

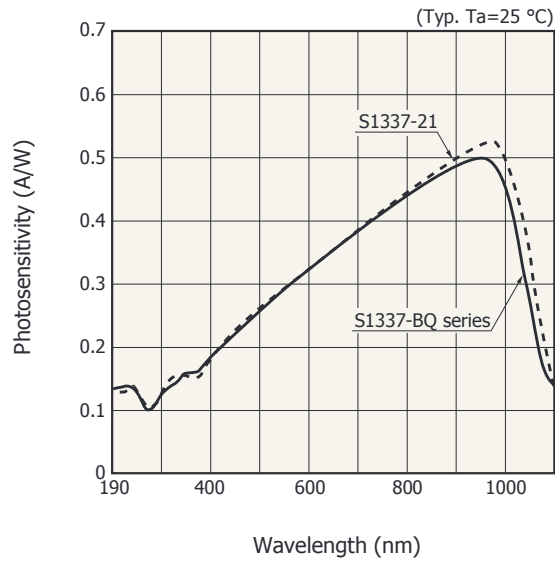
Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

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

Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λ_p (nm)	Photosensitivity 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 $R_L=1$ k Ω (μ s)	Terminal capacitance C_t $V_R=0$ V $f=10$ kHz (pF)	Shunt resistance R_{sh} $V_R=10$ mV		Noise equivalent power NEP (W/Hz ^{1/2})
			λ_p	200 nm		He-Ne laser 633 nm	GaAs LED 930 nm	Min. (μ A)	Typ. (μ A)					Min. (G Ω)	Typ. (G Ω)	
				Min.	Typ.											
S1337-16BQ	190 to 1100	960	0.5	0.10	0.12	0.33	0.5	4.0	5.3	50	0.2	65	0.2	0.6	1.0×10^{-14}	
S1337-16BR	340 to 1100		0.62	-	-	0.4	0.6	4.4	6.2						8.4×10^{-15}	
S1337-33BQ	190 to 1100		0.5	0.10	0.12	0.33	0.5	4.0	5.0	30	0.2	65	0.3	1	8.1×10^{-15}	
S1337-33BR	340 to 1100		0.62	-	-	0.4	0.6	4.4	6.2						6.5×10^{-15}	
S1337-66BQ	190 to 1100		0.5	0.10	0.12	0.33	0.5	20	27	100	1	380	0.1	0.4	1.3×10^{-14}	
S1337-66BR	340 to 1100		0.62	-	-	0.4	0.6	22	33						1.0×10^{-14}	
S1337-1010BQ	190 to 1100		0.5	0.10	0.12	0.33	0.5	65	78	200	3	1100	0.05	0.2	1.8×10^{-14}	
S1337-1010BR	340 to 1100		0.62	-	-	0.4	0.6	70	95						1.5×10^{-14}	
S1337-21	190 to 1100		0.52	0.10	0.13	0.34	0.51	200	250	500	8	4000	0.02	0.1	2.5×10^{-14}	

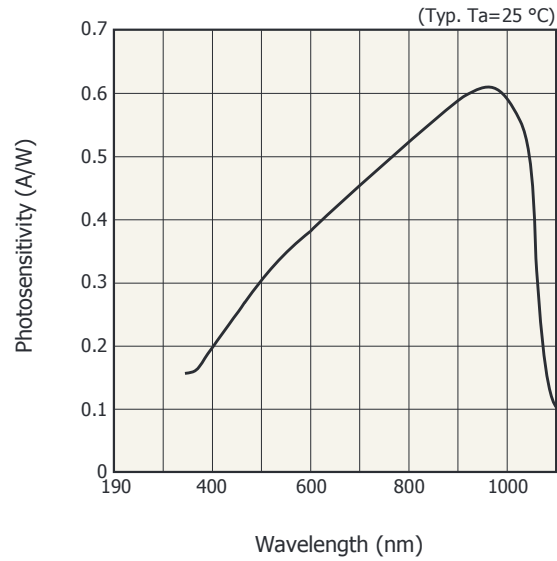
Spectral response

S1337BQ series, S1337-21



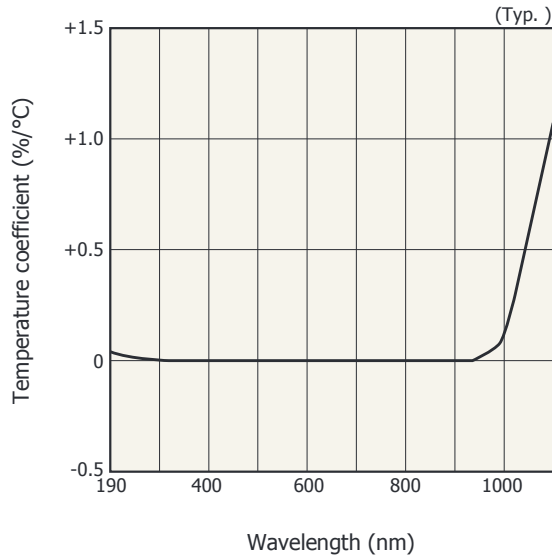
KSPD80102ED

S1337-BR series



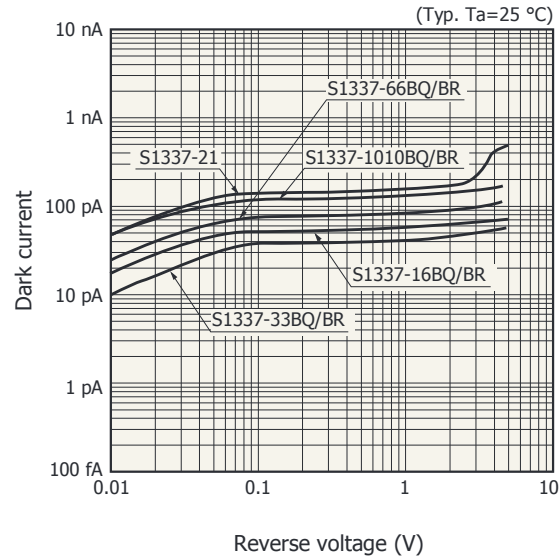
KSPD80306EA

Photosensitivity temperature characteristics



KSPD80053EB

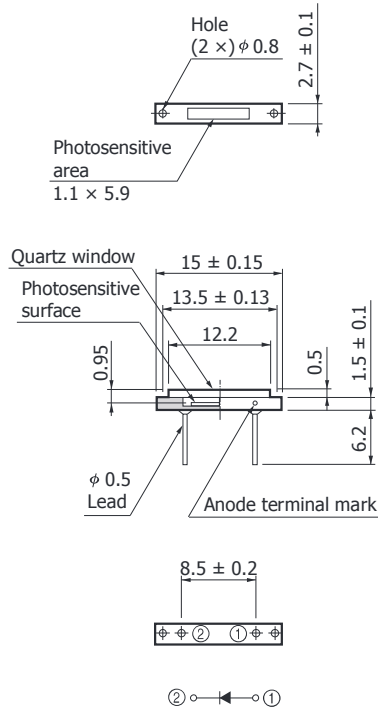
Dark current vs. reverse voltage



KSPD80104EC

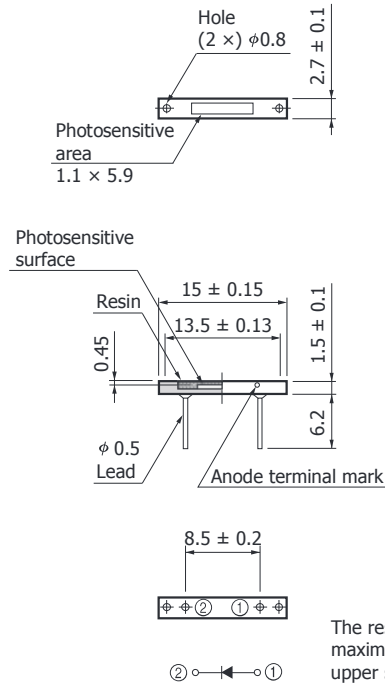
Dimensional outlines (unit: mm)

S1337-16BQ



KSPDA0105EB

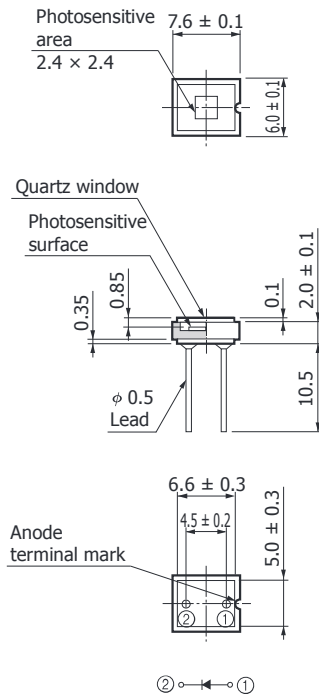
S1337-16BR



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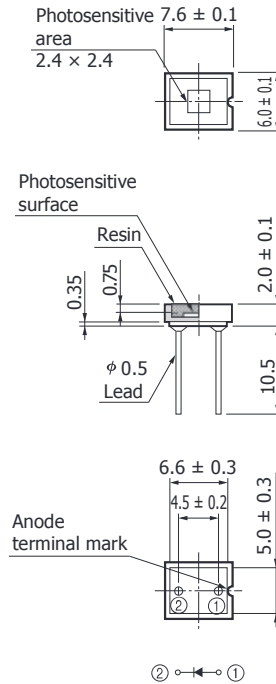
The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

S1337-33BQ



KSPDA0107EB

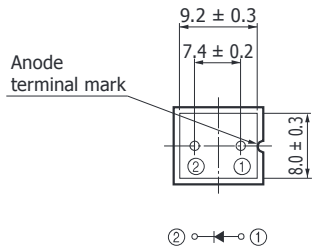
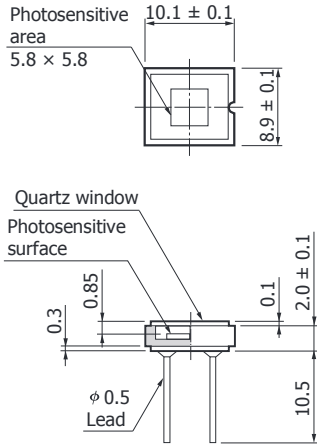
S1337-33BR



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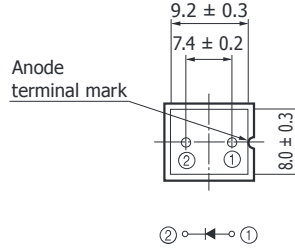
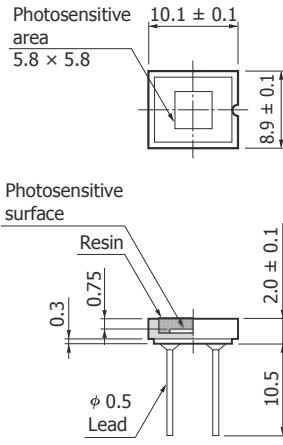
The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

S1337-66BQ



KSPDA0109EB

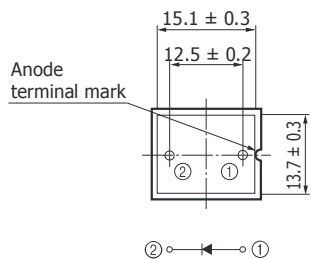
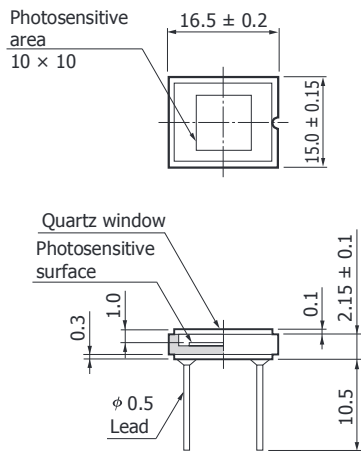
S1337-66BR



KSPDA0110EB

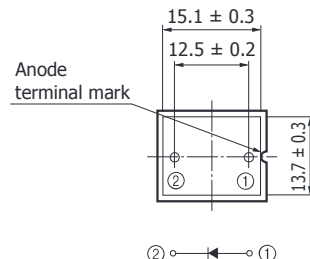
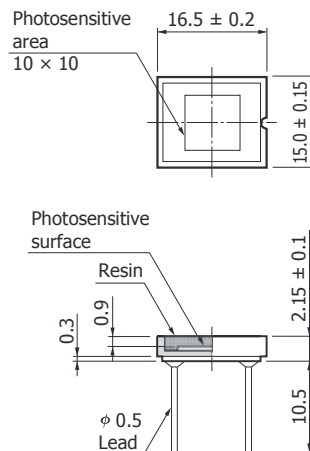
The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

S1337-1010BQ



KSPDA0111EB

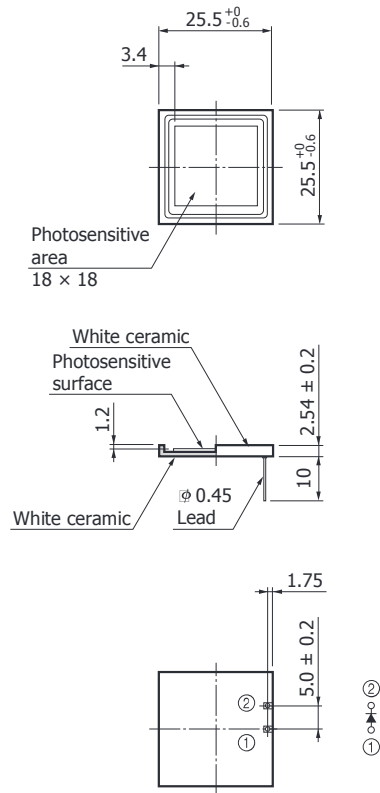
S1337-1010BR



KSPDA0112EB

The resin potting may extend a maximum of 0.1 mm above the upper surface of the package.

S1337-21



KSPDA0190EA

Information described in this material is current as of November, 2012.

Product specifications are subject to change without prior notice due to improvements or other reasons. Before assembly into final products, please contact us for the delivery specification sheet to check the latest information.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use.

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Cat. No. KSPD1032E06 Nov. 2012 DN

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