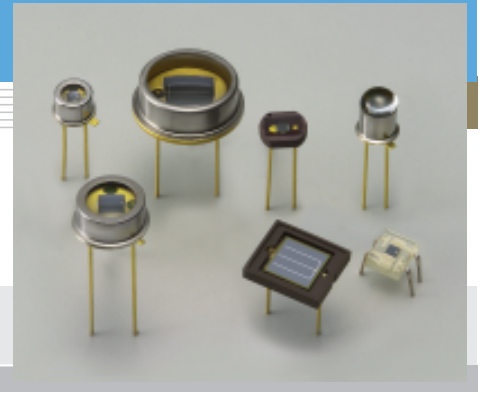


GaAsP photodiode

Diffusion type

Photodiode for visible light detection



Features

- Low dark current
- High stability

Applications

- Analytical instrument
- Color identification

■ General ratings / Absolute maximum ratings

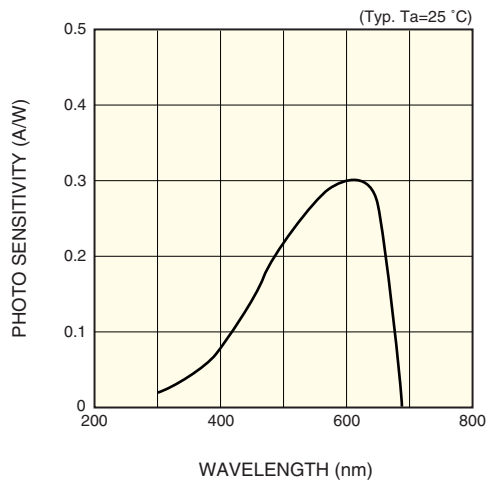
Type No.	Dimensional outline/ Window material *	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G1115	①/K	TO-18	1.3 × 1.3	1.66	5	-30 to +80	-40 to +85
G1116	②/K	TO-5	2.7 × 2.7	7.26			
G1117	③/K	TO-8	5.6 × 5.6	29.3			
G1118	④/R	Ceramic	1.3 × 1.3	1.66			
G1120	⑤/R	Ceramic	5.6 × 5.6	29.3			
G3067	⑥/L	TO-18	1.3 × 1.3	1.66			
G2711-01	⑦/R	Plastic	1.3 × 1.3	1.66			

■ 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 μ A		Dark current I_D Max. $V_R=10$ mV $V_R=1$ V		Temp. coefficient of I_D T_{CID} (times/ $^{\circ}$ C)	Rise time tr $V_R=0$ 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		NEP (W/Hz ^{1/2})
			λ_p	GaP LED 560 nm	He-Ne laser 633 nm								Min. (μ A)	Typ. (μ A)	
G1115	300 to 680	640	0.3	0.29	0.29	0.12	0.15	1	10	1.07	1	300	10	80	1.5×10^{-15}
G1116						0.45	0.6	2.5	25		4	1400	4	30	2.5×10^{-15}
G1117						2	2.5	5	50		15	6000	2	15	3.5×10^{-15}
G1118						0.12	0.15	1	10		1	300	10	80	1.5×10^{-15}
G1120						2	2.5	5	50		15	6000	2	15	3.5×10^{-15}
G3067						0.75	0.95	1	10		1	300	10	80	1.5×10^{-15}
G2711-01						0.15	0.18	1	10		1	300	10	80	1.5×10^{-15}

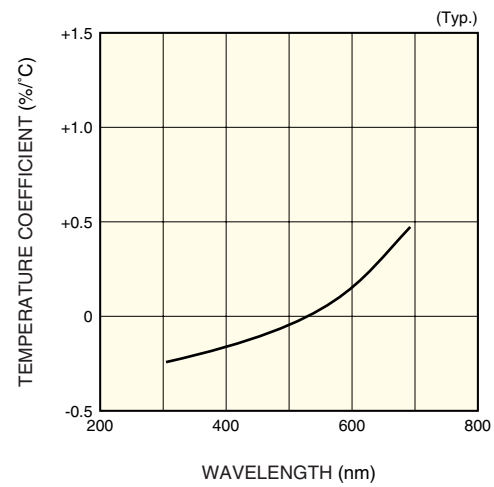
* Window material K: borosilicate glass, L: lens type borosilicate glass, R: resin coating

■ Spectral response



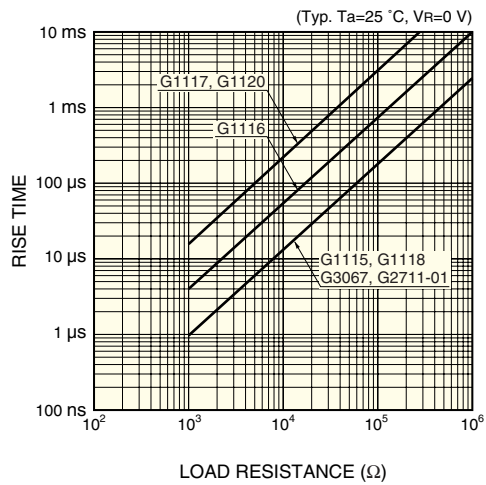
KGPDB0019EA

■ Photo sensitivity temperature characteristic



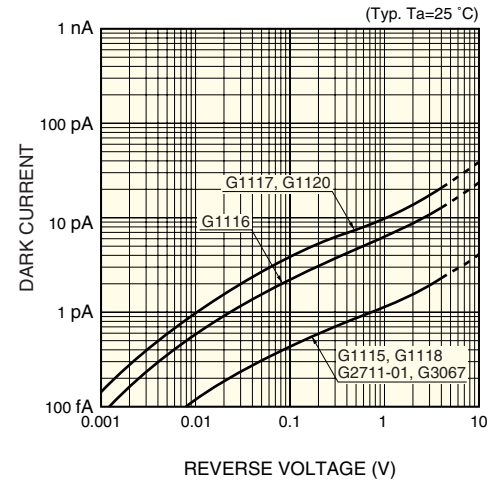
KGPDB0020EA

■ Rise time vs. load resistance



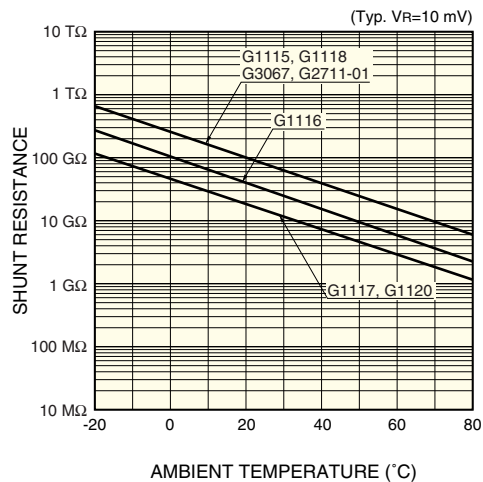
KGPDB0021EA

■ Dark current vs. reverse voltage



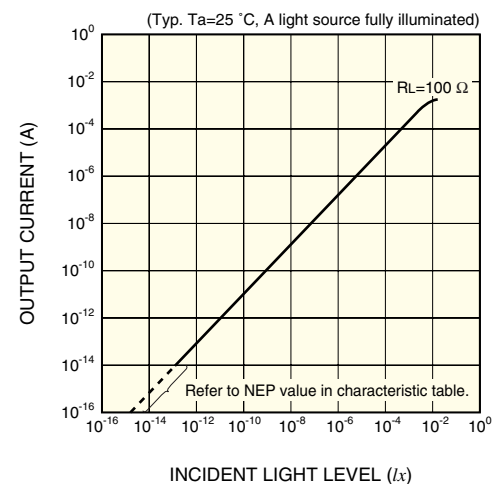
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■ Shunt resistance vs. ambient temperature



KGPDB0023EA

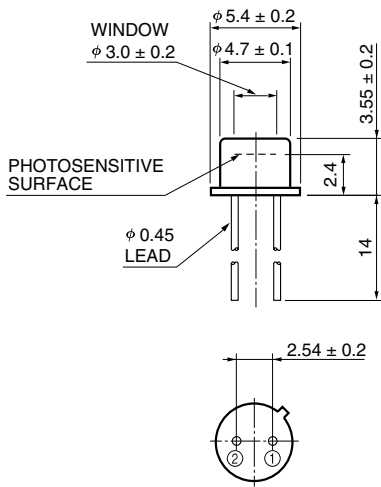
■ Short circuit current linearity



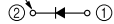
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■ Dimensional outlines (unit: mm)

① G1115



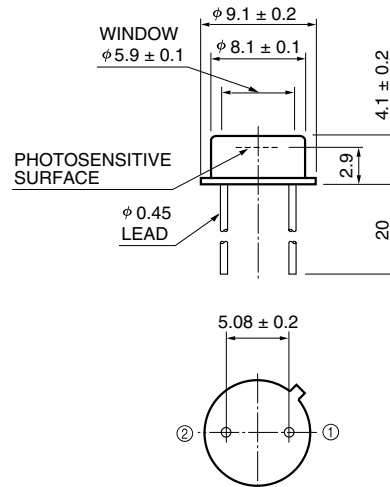
CONNECTED
TO CASE



Borosilicate glass window may extend a maximum of 0.1 mm beyond the upper surface of the cap.

KGPD A0012EA

② G1116



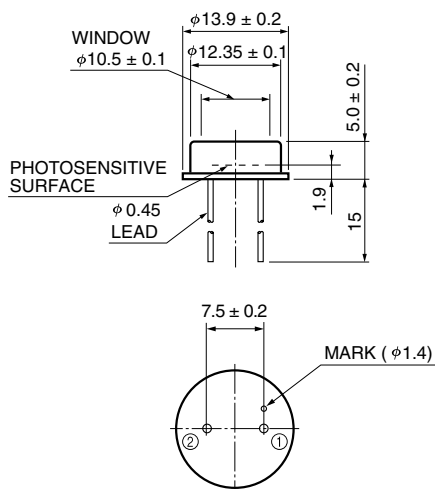
CONNECTED
TO CASE



Borosilicate glass window may extend a maximum of 0.2 mm beyond the upper surface of the cap.

KGPD A0013EA

③ G1117



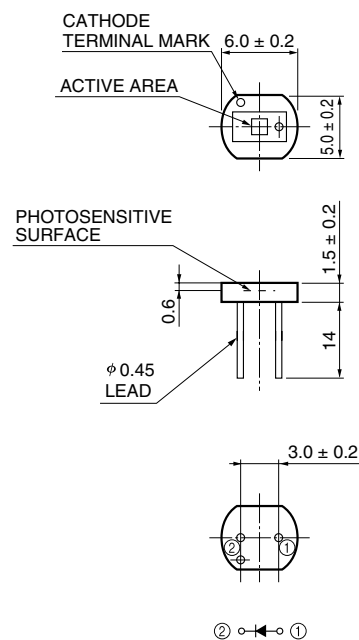
CONNECTED
TO CASE



Borosilicate glass window may extend a maximum of 0.2 mm beyond the upper surface of the cap.

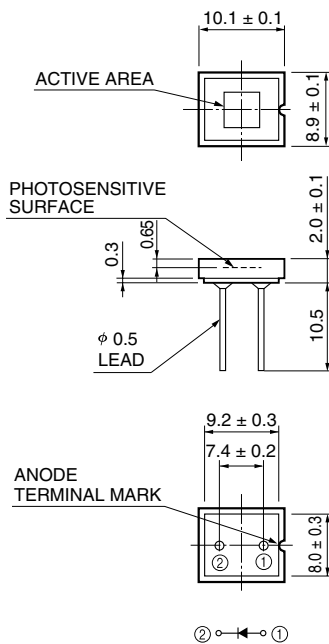
KGPD A0014EA

④ G1118



KGPD A0002EA

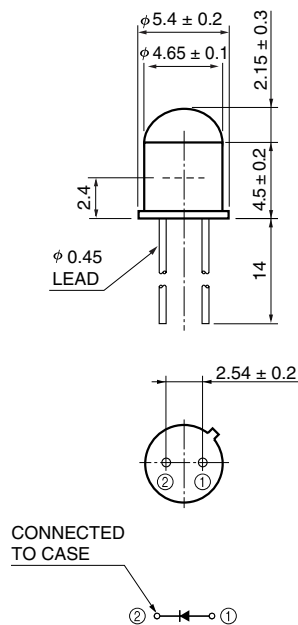
⑤ G1120



Coating resin may extend a maximum of 0.1 mm beyond the upper surface of the package.

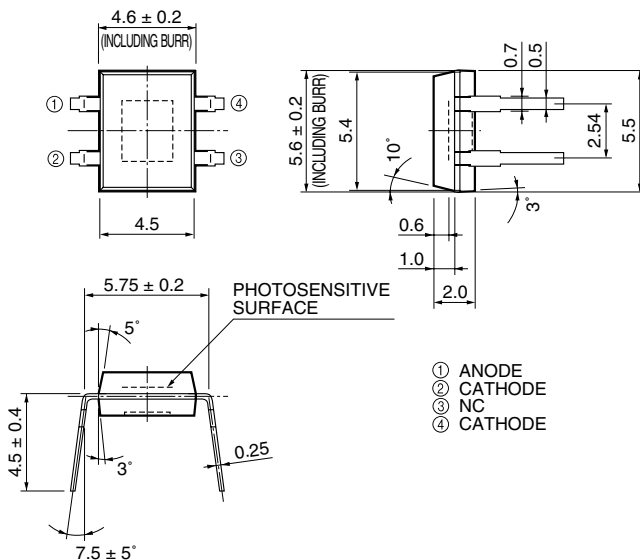
KGPDA0008EA

⑥ G3067



KGPDA0008EA

⑦ G2711-01



KGPDA0003EA

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HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Higashi-ku, Hamamatsu City, 435-8558 Japan, Telephone: (81) 53-434-3311, Fax: (81) 53-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation, 360 Foothill Road, P.O. Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH, Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 8152-3750, Fax: (49) 8152-2658

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trépu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741