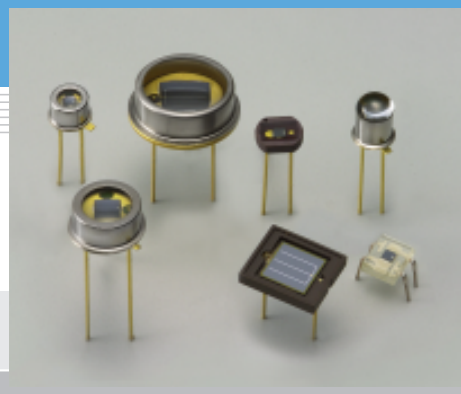


GaAsP photodiode

Diffusion type

Photodiode for visible light detection



Features

- Low dark current
- High stability

Applications

- Analytical instrument
- Color identification

■ General ratings / Absolute maximum ratings

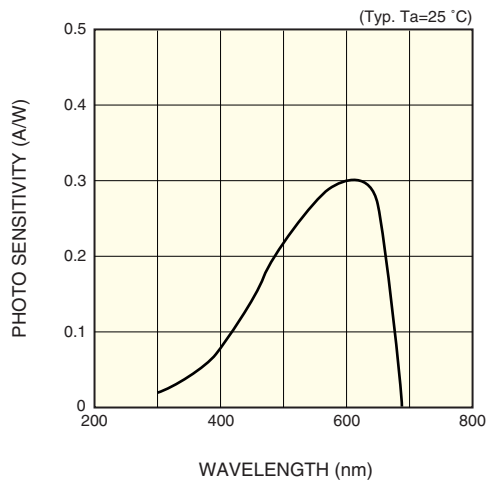
Type No.	Dimensional outline/ Window material *	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G1115	①/K	TO-18	1.3 × 1.3	1.66	5	-30 to +80	-40 to +85
G1116	②/K	TO-5	2.7 × 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 Isc 100 μ A		Dark current ID Max. VR=10 mV VR=1 V		Temp. coefficient of ID TCID (times/°C)	Rise time tr VR=0 V RL=1 k Ω (μ s)	Terminal capacitance Ct VR=0 V f=10 kHz (pF)	Shunt resistance Rsh VR=10 mV		NEP (W/Hz ^{1/2})
			λ_p	GaP LED 560 nm	He-Ne laser 633 nm								Min.	Typ.	
						(μ A)	(μ A)	(pA)	(pA)				(G Ω)	(G Ω)	
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}

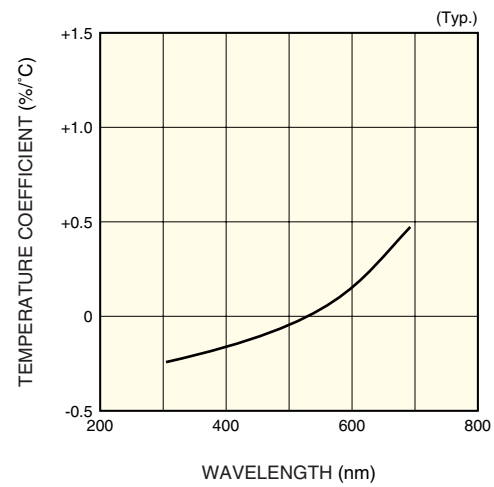
* Window material K: borosilicate glass, L: lens type borosilicate glass, R: resin coating

■ Spectral response



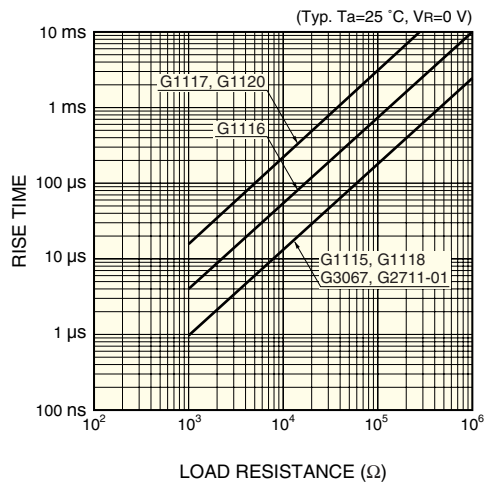
KGPDB0019EA

■ Photo sensitivity temperature characteristic



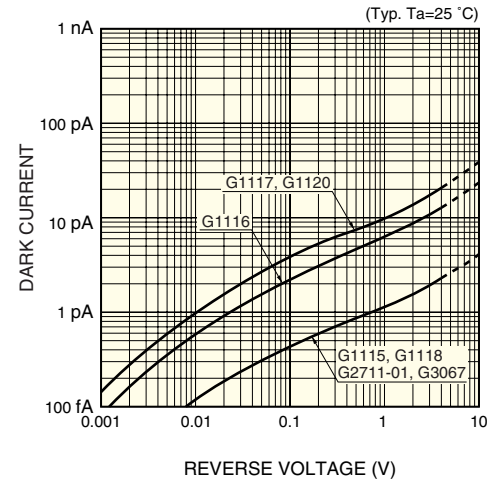
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■ Rise time vs. load resistance



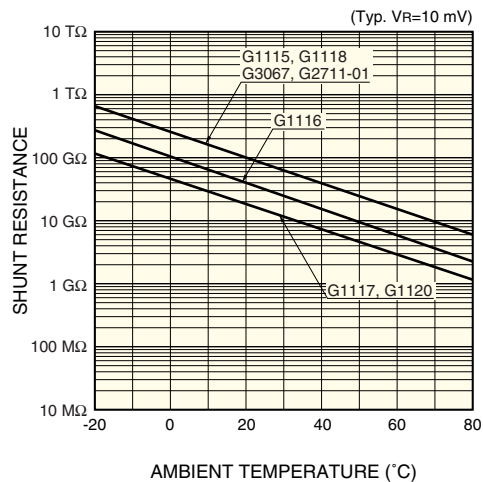
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■ Dark current vs. reverse voltage



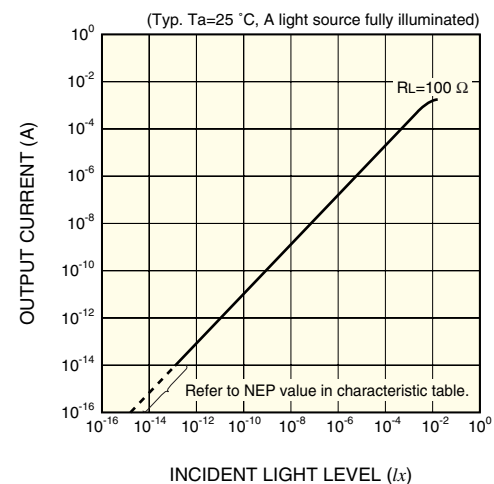
KGPDB0022EA

■ Shunt resistance vs. ambient temperature



KGPDB0023EA

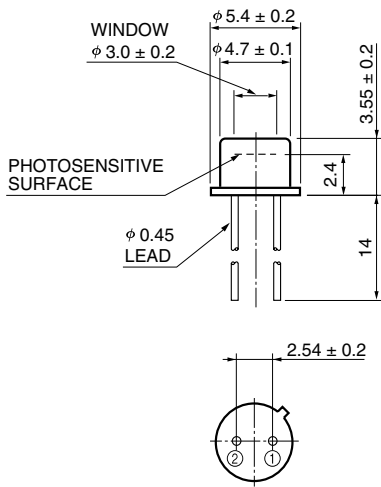
■ Short circuit current linearity



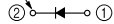
KGPDB0008EA

■ Dimensional outlines (unit: mm)

① G1115



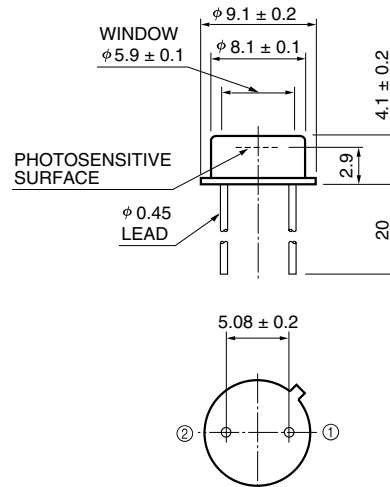
CONNECTED
TO CASE



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

KGPD A0012EA

② G1116



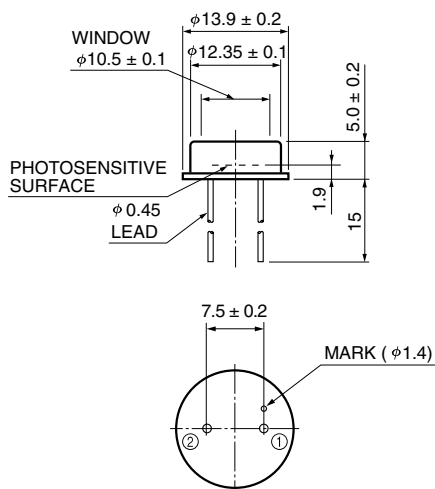
CONNECTED
TO CASE



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

KGPD A0013EA

③ G1117



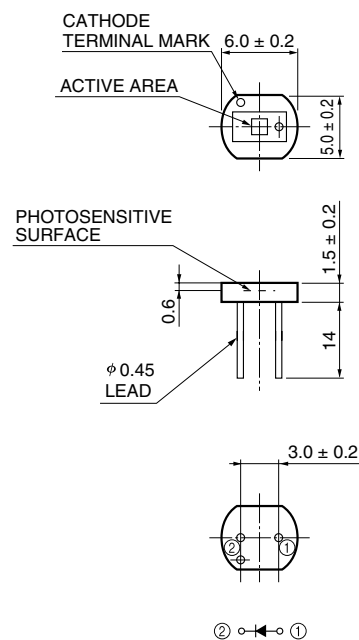
CONNECTED
TO CASE



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

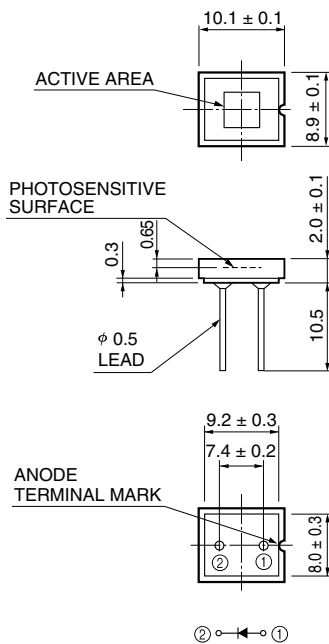
KGPD A0014EA

④ G1118



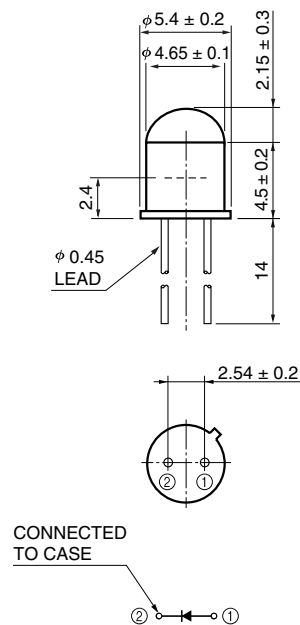
KGPD A0002EA

⑤ G1120



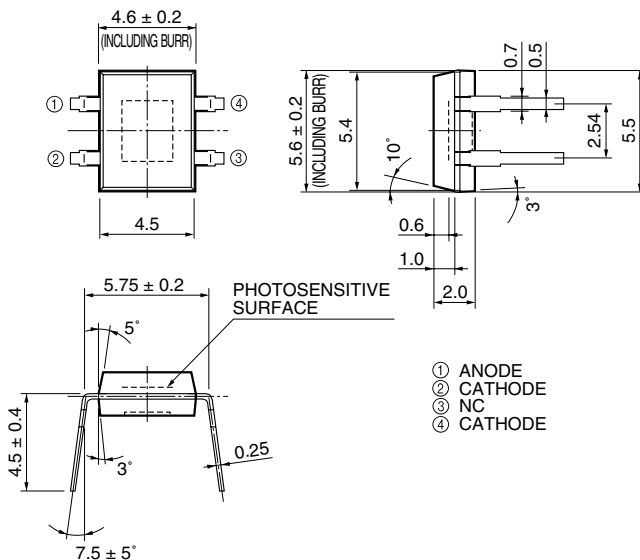
KGPDA0008EA

⑥ G3067



KGPDA0008EA

⑦ G2711-01



KGPDA0003EA

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