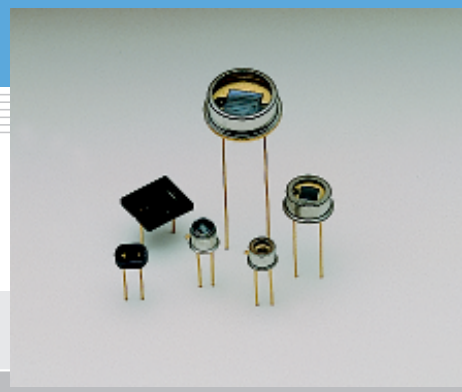


GaAsP photodiode

Diffusion type

Red sensitivity extended type



Features

- Low dark current
- High stability
- Red sensitivity extended type

Applications

- Analytical instruments
- Color identification

■ General ratings / Absolute maximum ratings

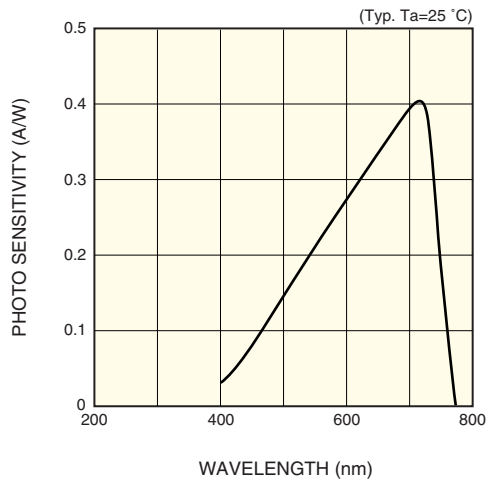
Type No.	Dimensional outline/ Window material *	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
G1735	①/K	TO-18	1.3 × 1.3	1.66	5	-30 to +80	-40 to +85
G1736	②/K	TO-5	2.7 × 2.7	7.26			
G1737	③/K	TO-8	5.6 × 5.6	29.3			
G1738	④/R	Ceramic	1.3 × 1.3	1.66			
G1740	⑤/R	Ceramic	5.6 × 5.6	29.3			
G3297	⑥/L	TO-18	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		Dark current Id Max.		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. (G Ω)	Typ. (G Ω)	
						Min. (μ A)	Typ. (μ A)	VR=10 mV (pA)	VR=1 V (pA)						
G1735	400 to 760	710	0.4	0.22	0.29	0.2	0.25	2	20	1.07	0.5	250	5	25	2.0 $\times 10^{-15}$
G1736						0.8	1.1	5	50		1.8	1200	2	15	3.2 $\times 10^{-15}$
G1737						4	5	10	100		10	4500	1	5	4.5 $\times 10^{-15}$
G1738						0.2	0.25	2	20		0.5	250	5	25	2.0 $\times 10^{-15}$
G1740						4	5	10	100		10	4500	1	5	4.5 $\times 10^{-15}$
G3297						1.5	1.8	2	20		0.5	250	5	25	2.0 $\times 10^{-15}$

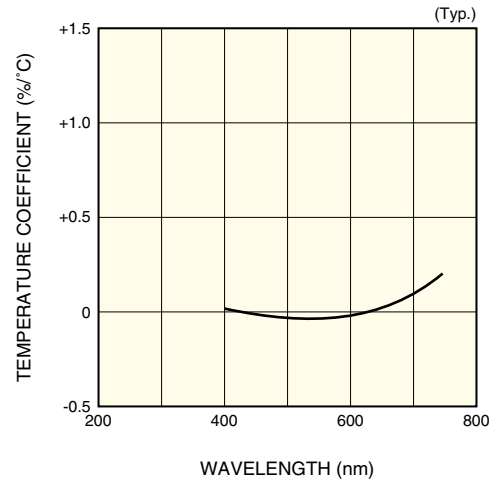
* Window material K: borosilicate glass, L: lens type borosilicate glass, R: resin coating

■ Spectral response



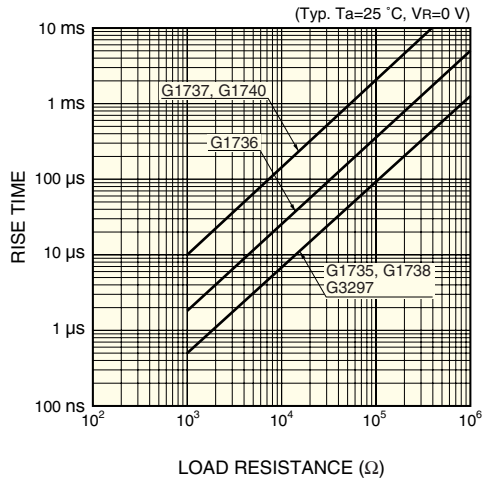
KGPD80024EA

■ Photo sensitivity temperature characteristic



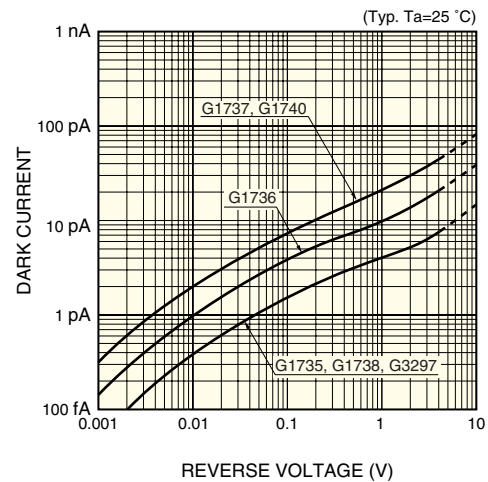
KGPD80025EA

■ Rise time vs. load resistance



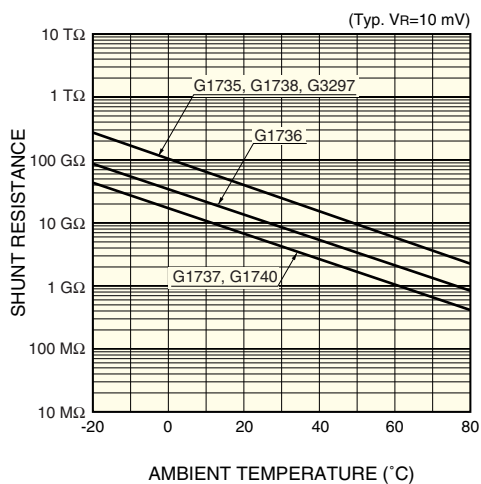
KGPD80026EA

■ Dark current vs. reverse voltage



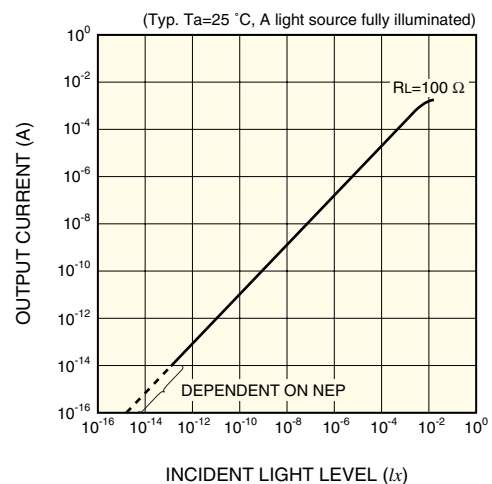
KGPD80027EA

■ Shunt resistance vs. ambient temperature



KGPD80028EA

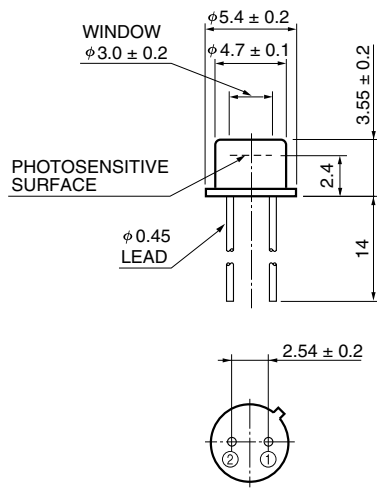
■ Short circuit current linearity



KGPD80008EA

■ Dimensional outlines (unit: mm)

① G1735



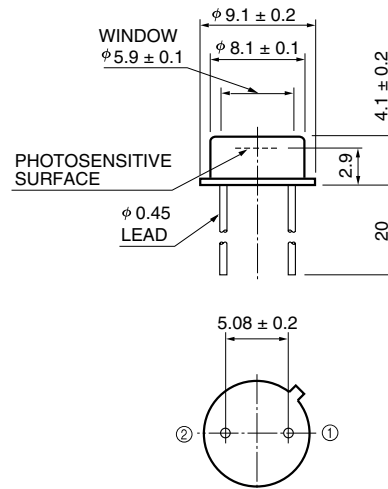
CONNECTED
TO CASE



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

KGPD0012EA

② G1736



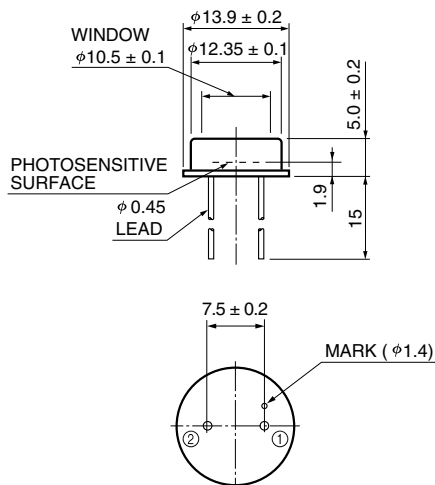
CONNECTED
TO CASE



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

KGPD0013EA

③ G1737



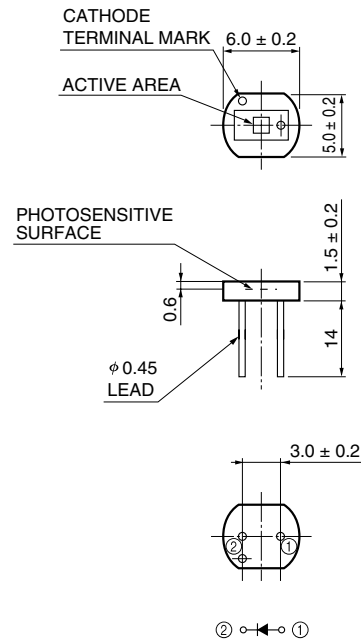
CONNECTED
TO CASE



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

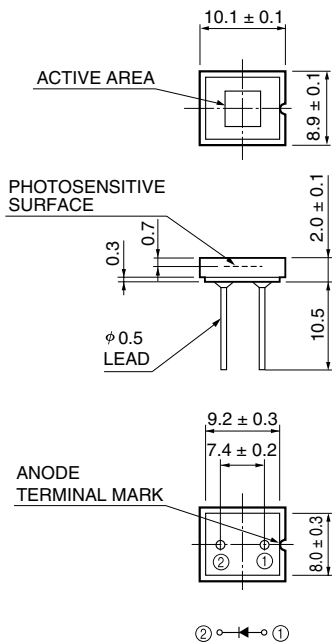
KGPD0014EA

④ G1738



KGPD0002EA

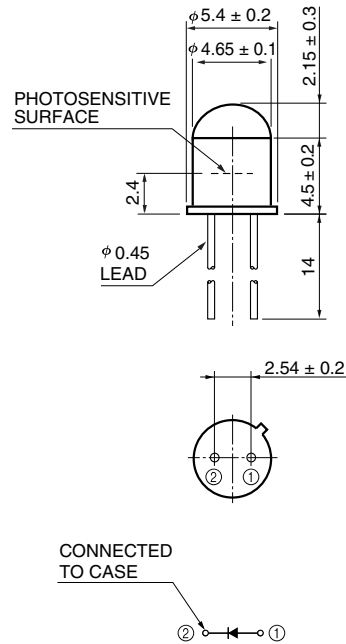
⑤ G1740



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

KGPD0010EA

⑥ G3297



CONNECTED TO CASE

KGPD0009EA

HAMAMATSU

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