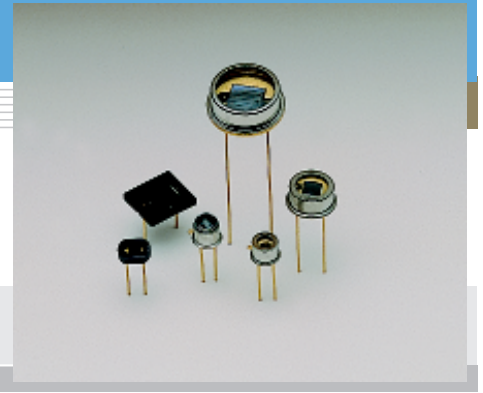


GaAsP photodiode

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

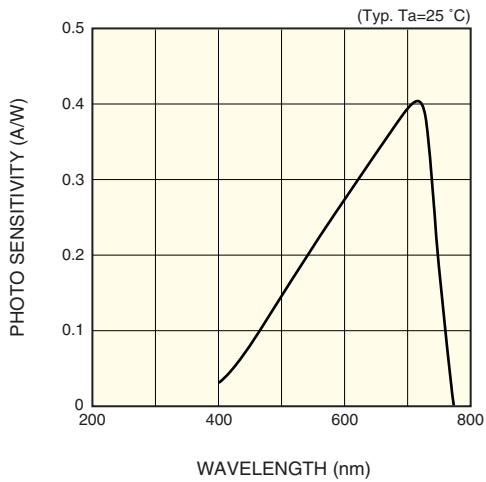
Type No.	Dimensional outline/ Window material *	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage V _R Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
G1735	①/K	TO-18	1.3 × 1.3	1.66	5	-30 to +80	-40 to +85
G1736	②/K	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. T_a=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 k		Dark current I _d Max.		Temp. coefficient of I _d T _{CID} (times/°C)	Rise time t _r V _R =0 V R _L =1 kΩ (μs)	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. (μA)	Typ. (μA)	V _R =10 mV (pA)	V _R =1 V (pA)				Min. (GΩ)	Typ. (GΩ)	
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 × 10 ⁻¹⁵
G1736						0.8	1.1	5	50				2	15	3.2 × 10 ⁻¹⁵
G1737						4	5	10	100				1	5	4.5 × 10 ⁻¹⁵
G1738						0.2	0.25	2	20				5	25	2.0 × 10 ⁻¹⁵
G1740						4	5	10	100				1	5	4.5 × 10 ⁻¹⁵
G3297						1.5	1.8	2	20				5	25	2.0 × 10 ⁻¹⁵

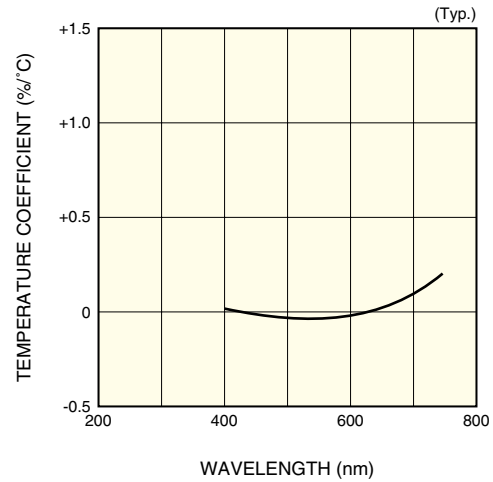
* Window material K: borosilicate glass, L: lens type borosilicate glass, R: resin coating

Spectral response



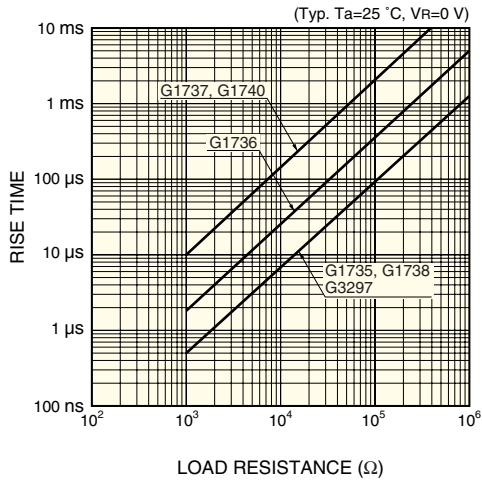
KGPD80024EA

Photo sensitivity temperature characteristic



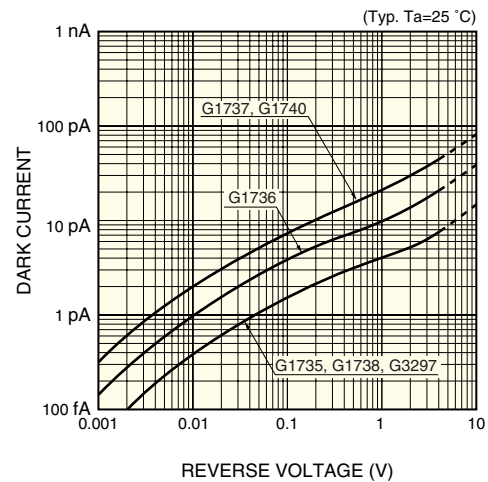
KGPD80025EA

Rise time vs. load resistance



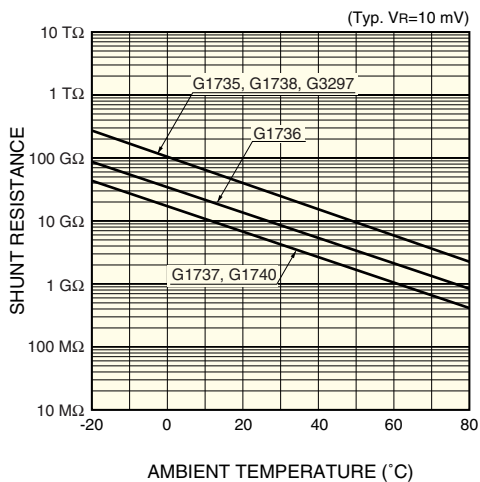
KGPD80026EA

Dark current vs. reverse voltage



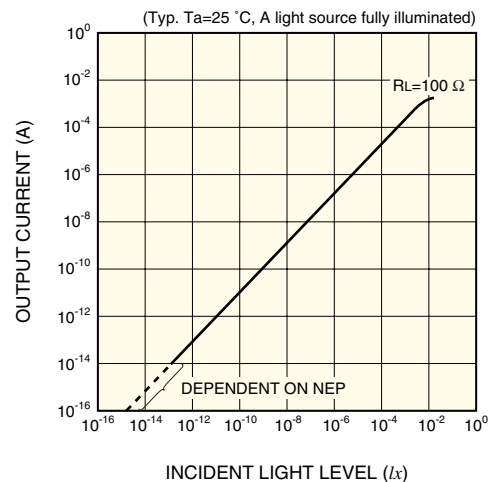
KGPD80027EA

Shunt resistance vs. ambient temperature



KGPD80028EA

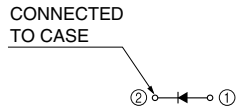
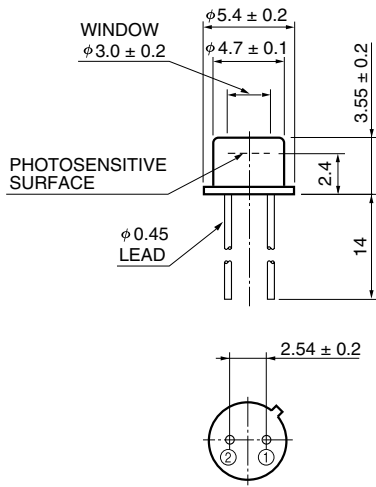
Short circuit current linearity



KGPD80008EA

■ Dimensional outlines (unit: mm)

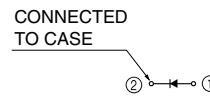
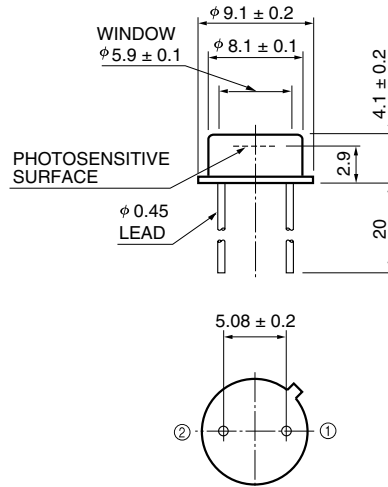
① G1735



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

KGPD A0012EA

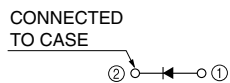
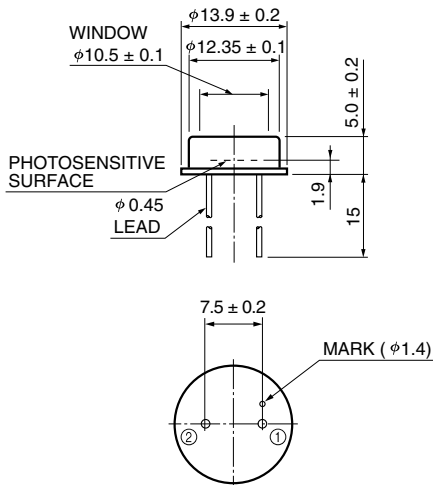
② G1736



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

KGPD A0013EA

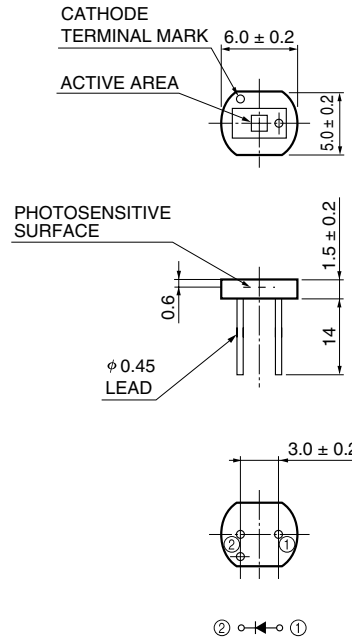
③ G1737



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

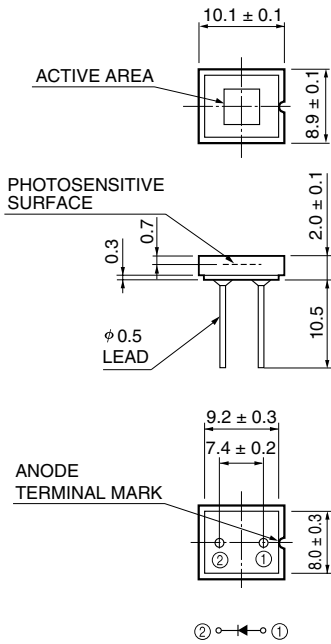
KGPD A0014EA

④ G1738



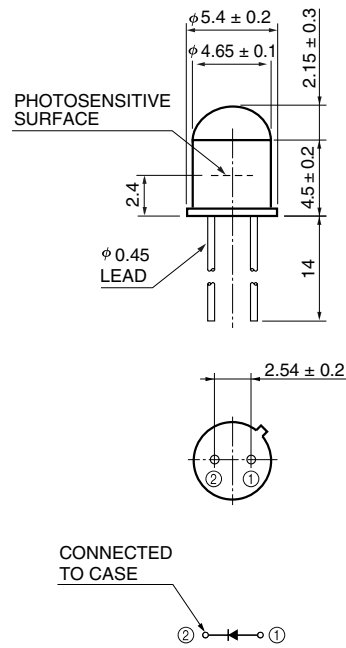
KGPD A0002EA

⑤ G1740



KGPD0010EA

⑥ G3297



KGPD0009EA