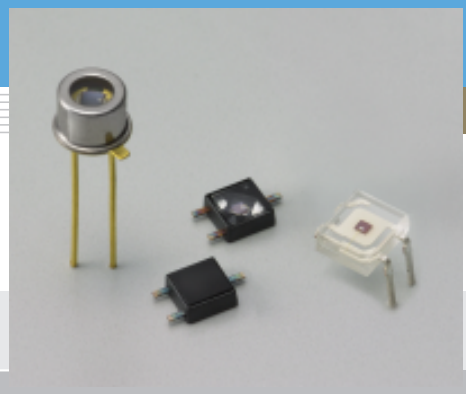


GaAsP photodiode

Diffusion type

Short-wavelength type photodiode



Features

- Low dark current
- Narrow spectral response range

Applications

- Analytical instruments
- UV detection

General ratings / Absolute maximum ratings

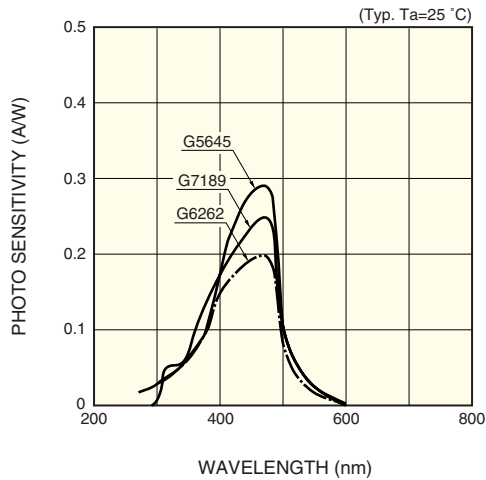
Type No.	Dimensional outline/ Window material *	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage V _R Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
G5645	①/K	TO-18	0.8 × 0.8	0.58	5	-30 to +80	-40 to +85
G5842	②	Plastic					
G6262	②	Plastic					
G7189	③/R	Plastic					

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

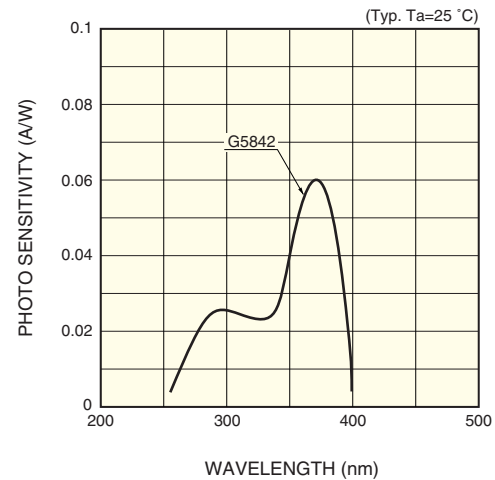
Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λ_p (nm)	Photo sensitivity S (A/W)		Short circuit current I _{sc} 1000 lx		Dark current I _D V _R =5 V Max. (pA)	Temp. coefficient of I _D T _{CID} (times/°C)	Rise time t _f V _R =0 V R _L =1 k Ω (μ s)	Terminal capacitance C _t V _R =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	Min. (nA)	Typ. (nA)					Min. (G Ω)	Typ. (G Ω)	
G5645	300 to 580	470	0.28	0.05	60	90	50	1.07	3	80	10	80	2.3 × 10 ⁻¹⁵
G5842	260 to 400	370	0.06	-	-	2							7.6 × 10 ⁻¹⁵
G6262	280 to 580	470	0.2	0.05	45	65							2.3 × 10 ⁻¹⁵
G7189	300 to 580	470	0.25	0.02	45	65							2.3 × 10 ⁻¹⁵

* Window material K: borosilicate glass, R: resin coating

■ Spectral response

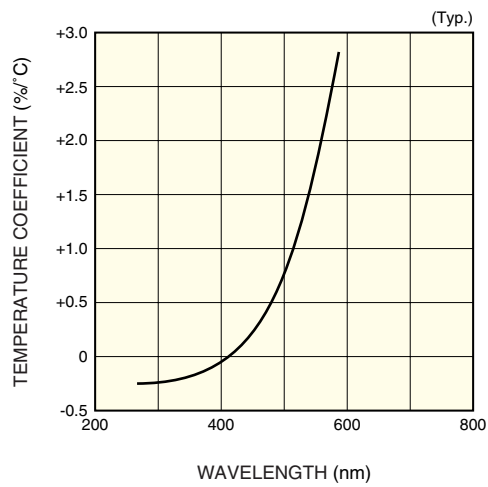


KGPDB0029EA



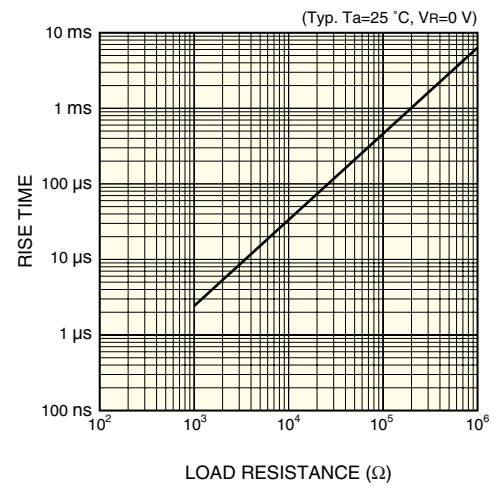
KGPDB0001EC

■ Photo sensitivity temperature characteristic



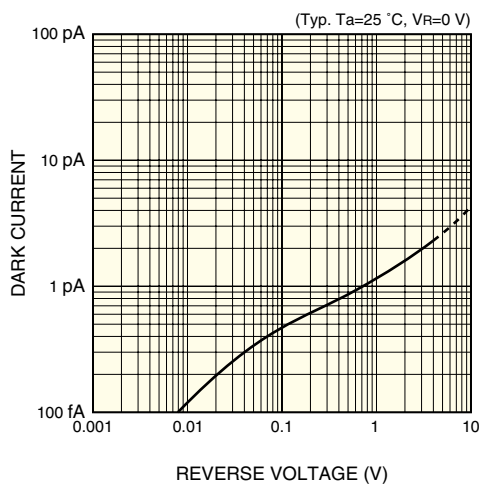
KGPDB0030EA

■ Rise time vs. load resistance



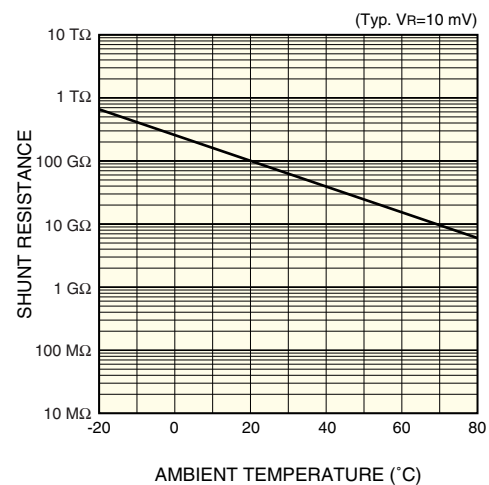
KGPDB00031EA

■ Dark current vs. reverse voltage



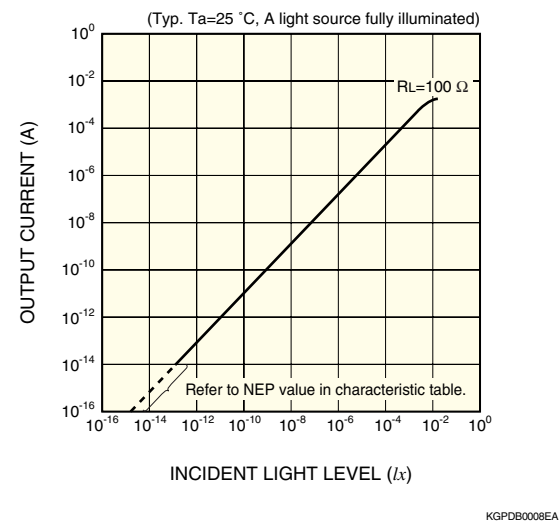
KGPDB00032EA

■ Shunt resistance vs. ambient temperature



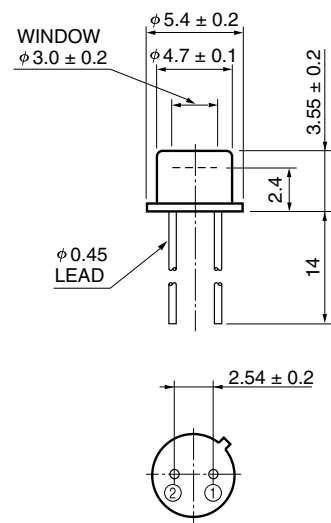
KGPDB00033EA

■ Short circuit current linearity

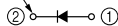


■ Dimensional outlines (unit: mm)

① G5645



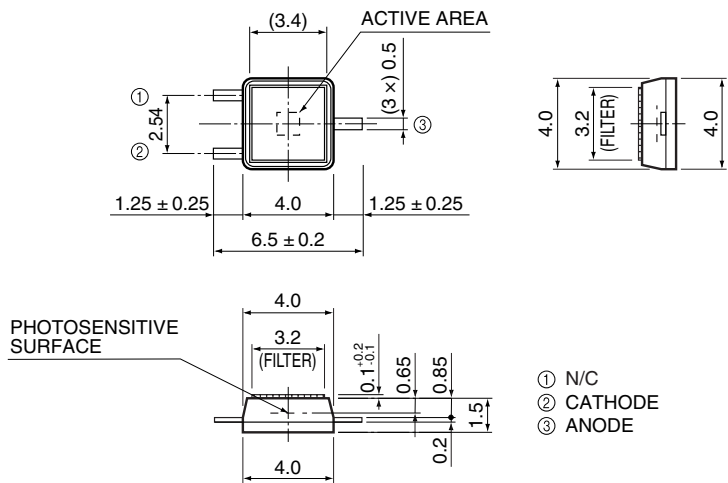
CONNECTED
TO CASE



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

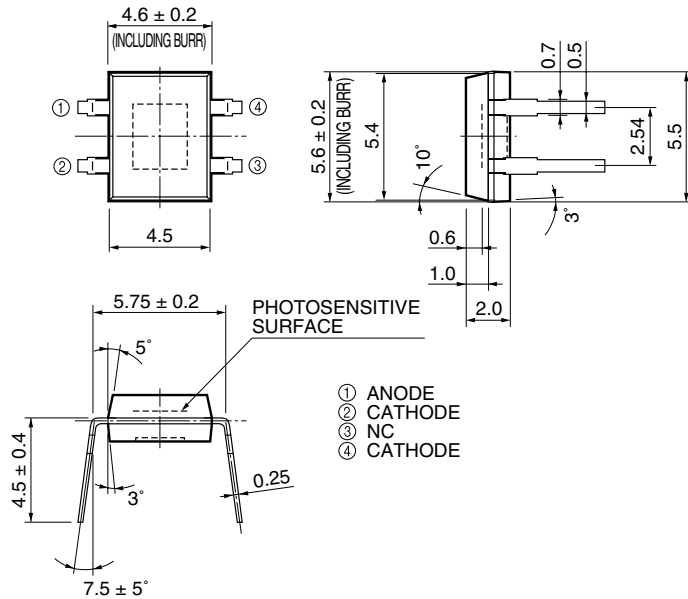
KGPD A0012EA

② G5842, G6262



KGPD A0004EA

③ G7189



KGPD40003EA

HAMAMATSU

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