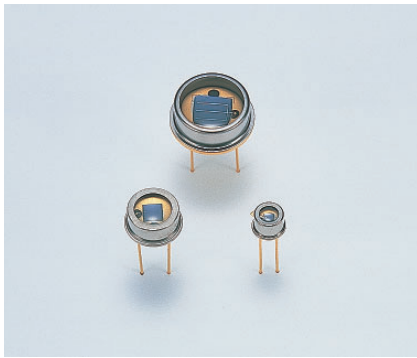


GaP photodiode



G1961

G1962

G1963

Schottky type

Features

- Low dark current
- High UV sensitivity

Applications

- Analytical instruments
- UV detection

Structure / Absolute maximum ratings

Type no.	Dimensional outline/ Window material	Package	Photosensitive area size (mm)	Effective photosensitive area (mm ²)	Absolute maximum ratings		
					Reverse voltage V _R max (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
G1961	①/Q*	TO-18	1.1 × 1.1	1.0	5	-10 to +60	-20 to +70
G1962	②/Q	TO-5	2.3 × 2.3	5.2			
G1963	③/Q	TO-8	4.6 × 4.6	21			

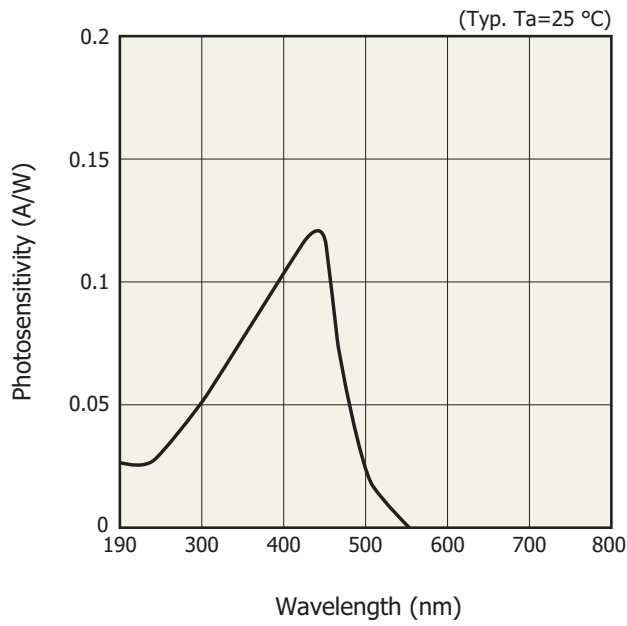
* Window material Q: quartz glass

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

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

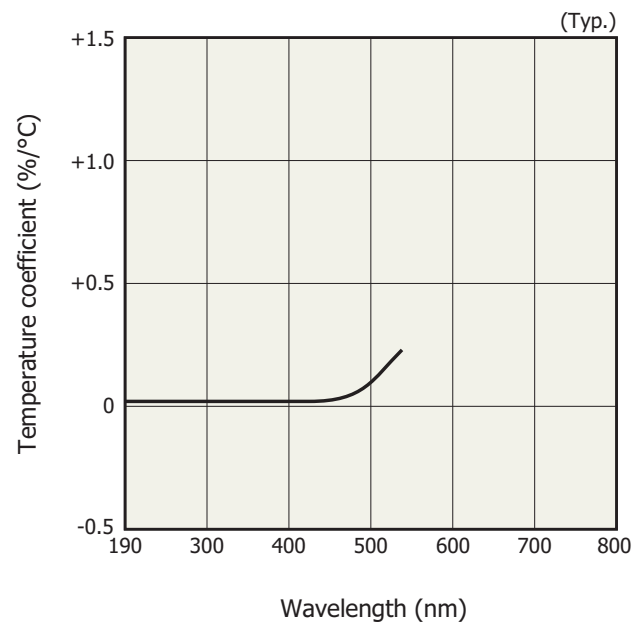
Type no.	Spectral response range λ (nm)	Peak sensitivity wavelength λ _p (nm)	Photosensitivity S (A/W)			Short circuit current I _{sc} 1000 lx		Dark current I _D max.		Temp. coefficient of I _D T _{CI D} (times/°C)	Rise time t _r V _R =0 V R _L =1 kΩ (μs)	Terminal capacitance C _t V _R =0 V f=10 kHz (pF)	Shunt resistance R _{sh} V _R =10 mV		Noise equivalent power NEP (W/Hz ^{1/2})
			λ _p	Hg line 254 nm	400 nm	Min. (μA)	Typ. (μA)	V _R =10 mV (pA)	V _R =1 V (pA)				Min. (GΩ)	Typ. (GΩ)	
G1961	190 to 550	440	0.12	0.03	0.1	0.04	0.05	2.5	25	1.11	5	400	4	40	5.4 × 10 ⁻¹⁵
G1962						0.23	0.3	5	50				2	20	7.6 × 10 ⁻¹⁵
G1963						0.75	0.9	10	100				1	1	1.1 × 10 ⁻¹⁴

Spectral response



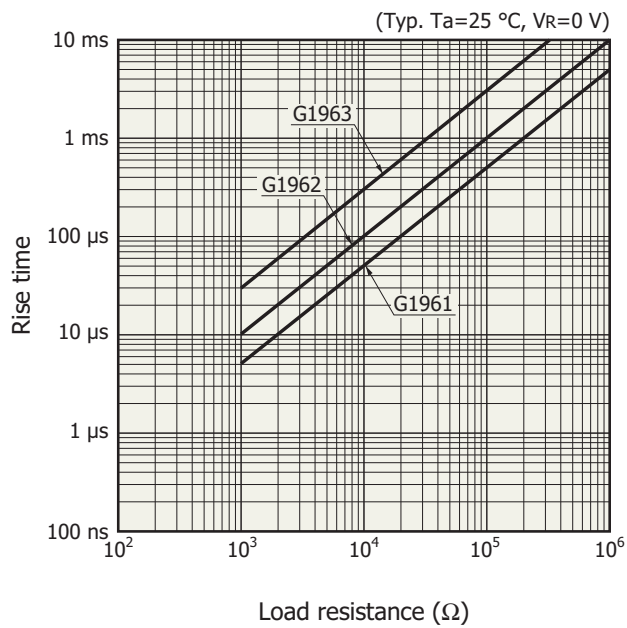
KGPD0014EA

Photosensitivity temperature characteristic



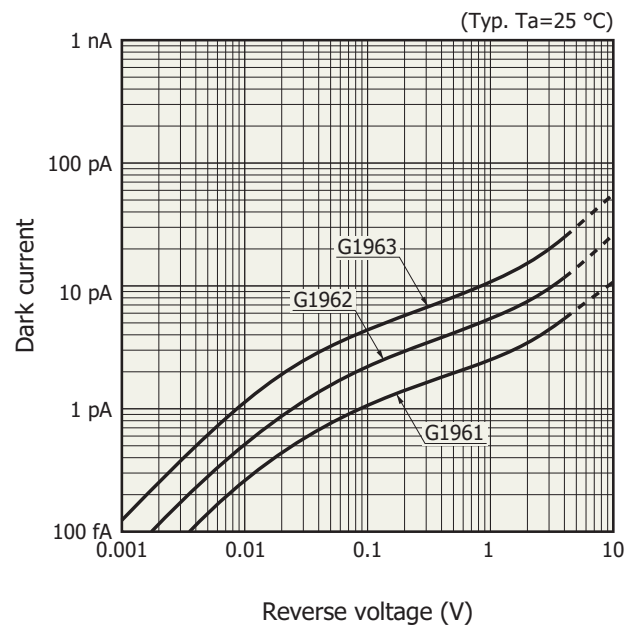
KGPD0017EB

Rise time vs. load resistance



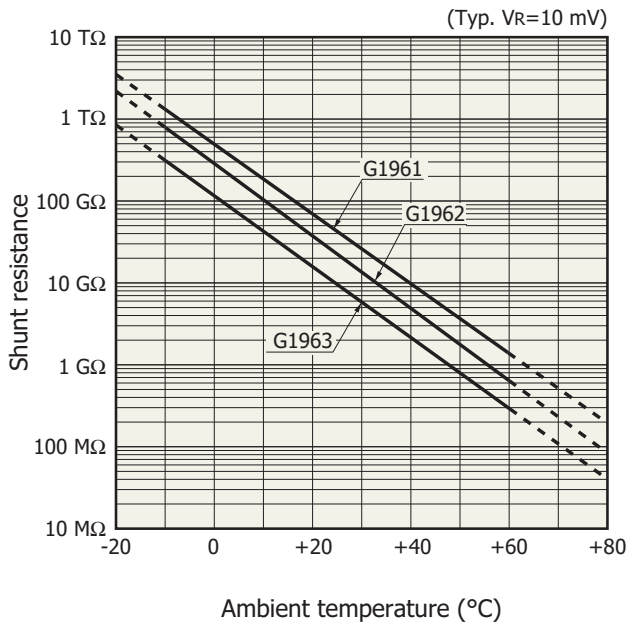
KGPD0015EA

Dark current vs. reverse voltage



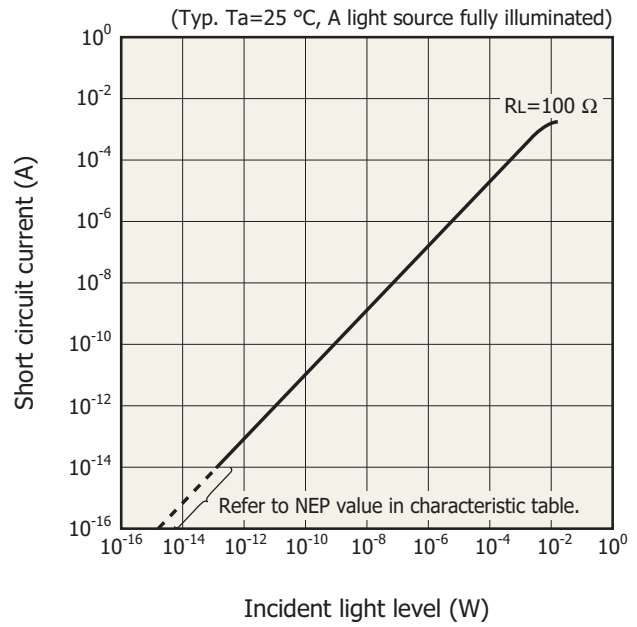
KGPD0016EA

Shunt resistance vs. ambient temperature



KGPD0018EA

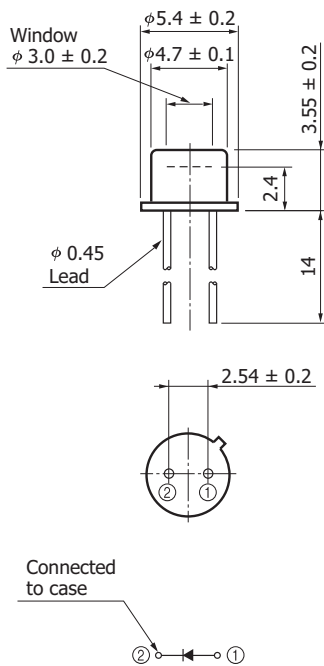
Short circuit current linearity



KGPD0008EB

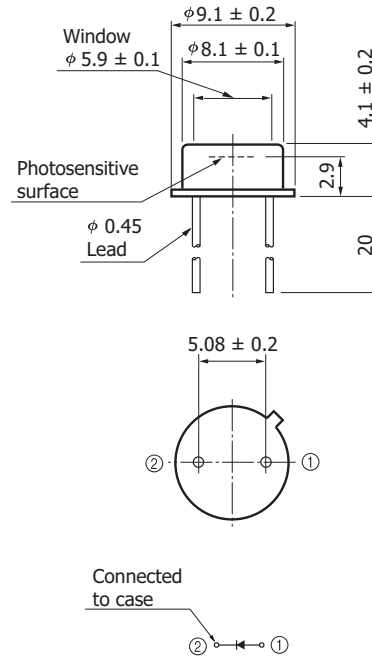
Dimensional outline (unit: mm)

① G1961



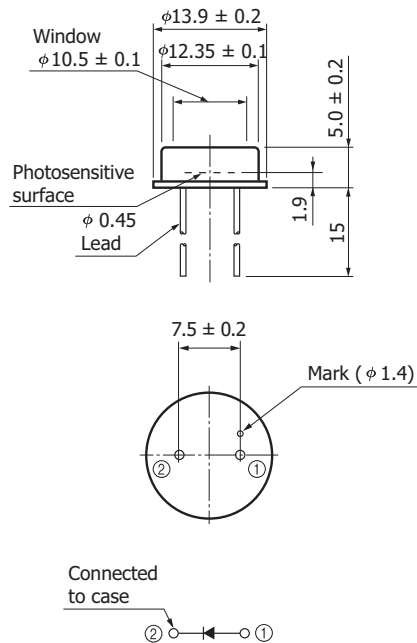
KGPD0032EA

② G1962



KGPD0033EA

③ G1963



KGPDAA0034EA

Information described in this material is current as of May, 2012.

Product specifications are subject to change without prior notice due to improvements or other reasons. Before assembly into final products, please contact us for the delivery specification sheet to check the latest information.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use.

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