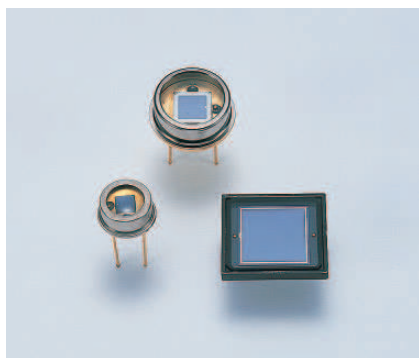




GaAsP photodiode

G1126-02

G1127-02

G2119

Schottky type for UV to visible range

Features

- Low dark current
- High UV sensitivity

Applications

- Analytical instruments
- Color identification
- 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)
G1126-02	①/Q*	TO-5	2.3 × 2.3	5.2	5	-10 to +60	-20 to +70
G1127-02	②/Q	TO-8	4.6 × 4.6	21			
G2119	③/Q	Ceramic	10.1 × 10.1	98			

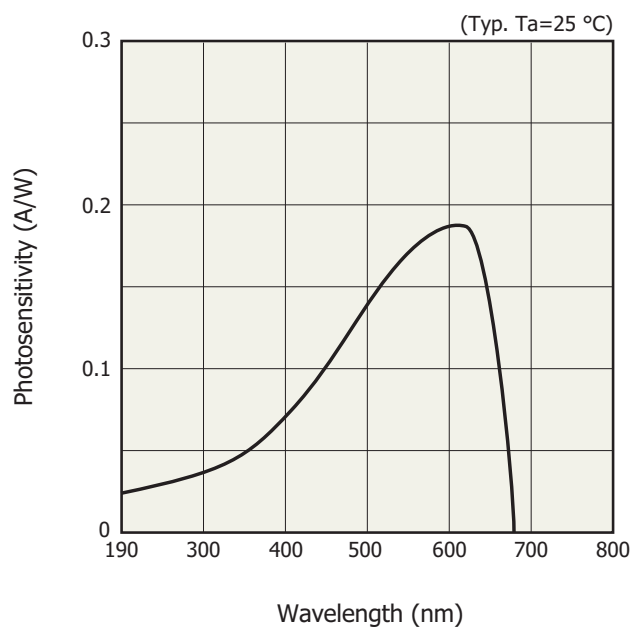
* Window material Q: quartz glass

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.

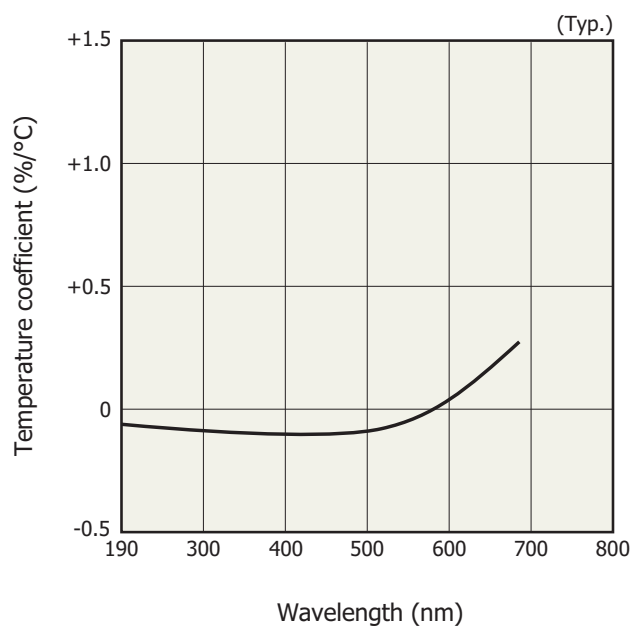
Electrical and optical characteristics (Typ. T_a=25 °C, unless otherwise noted)

Type no.	Spectral response range λ (nm)	Peak sensitivity wave-length λ _p (nm)	Photosensitivity S (A/W)				Short circuit current I _{sc} 100 lx		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		Noise equivalent power NEP (W/Hz ^{1/2})
			λ _p	Hg line 254 nm	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)	
G1126-02	190 to 680	610	0.18	0.035	0.17	0.17	0.25	0.3	5	50	1.07	3.5	1800	2	15	5.8 × 10 ⁻¹⁵
G1127-02							0.9	1.2	10	100		12	7000	1	8	8.0 × 10 ⁻¹⁵
G2119							5	6	100	5000		55	25000	0.1	0.7	2.4 × 10 ⁻¹⁴

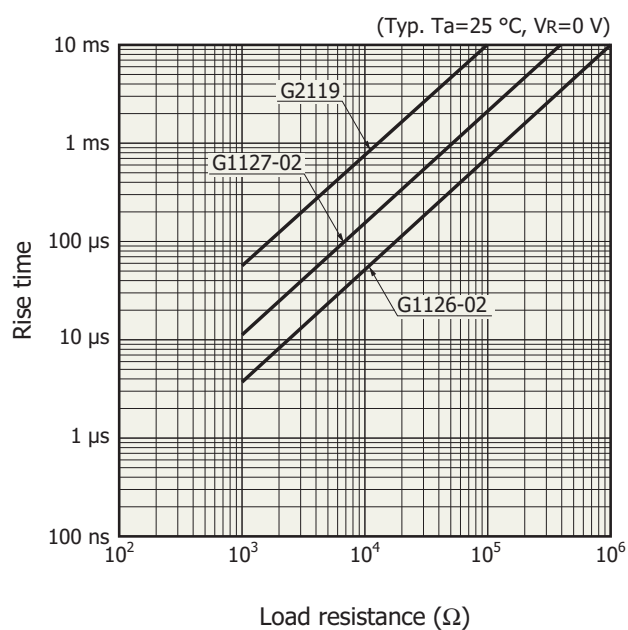
Spectral response



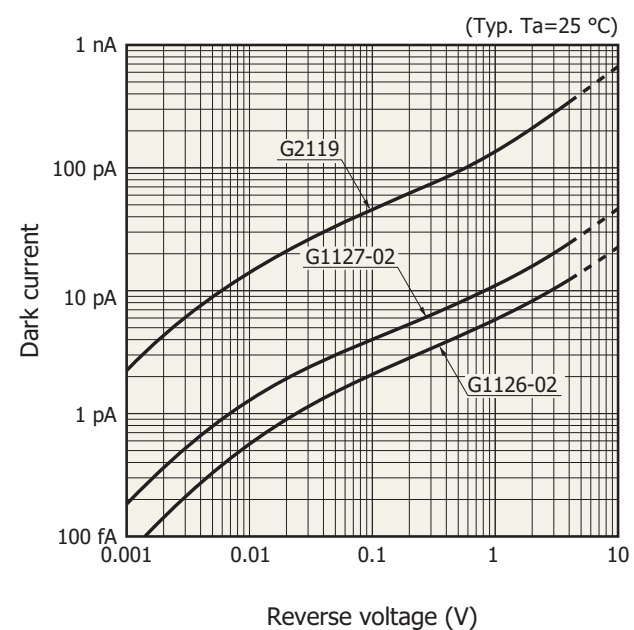
Photosensitivity temperature characteristic



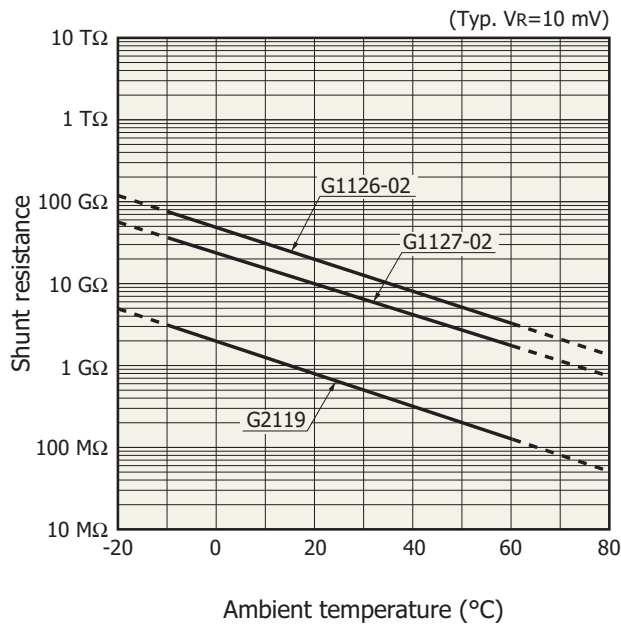
Rise time vs. load resistance



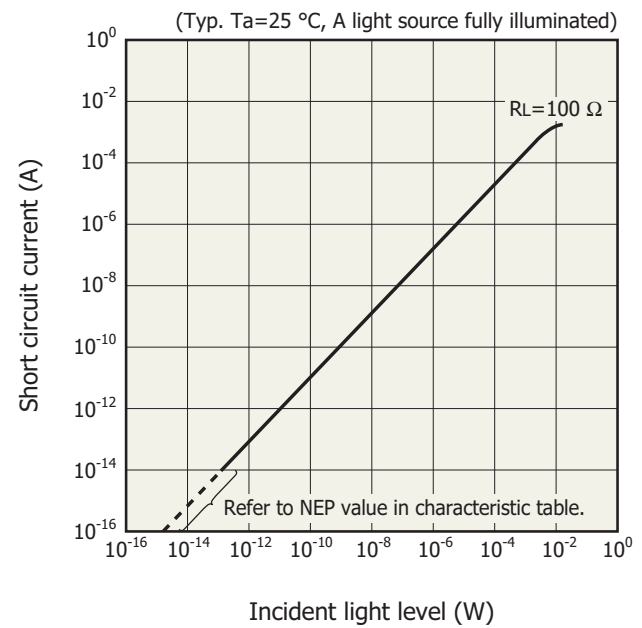
Dark current vs. reverse voltage



Shunt resistance vs. ambient temperature

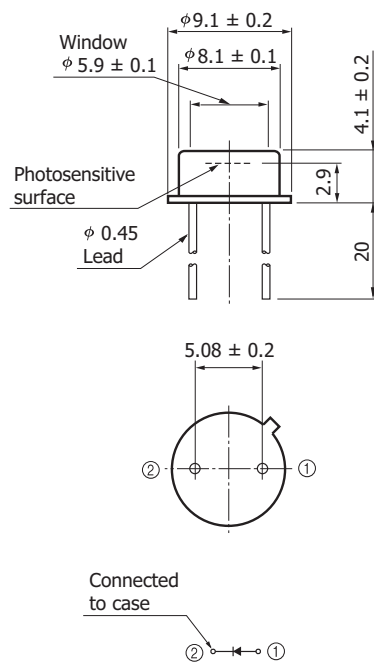


Short circuit current linearity

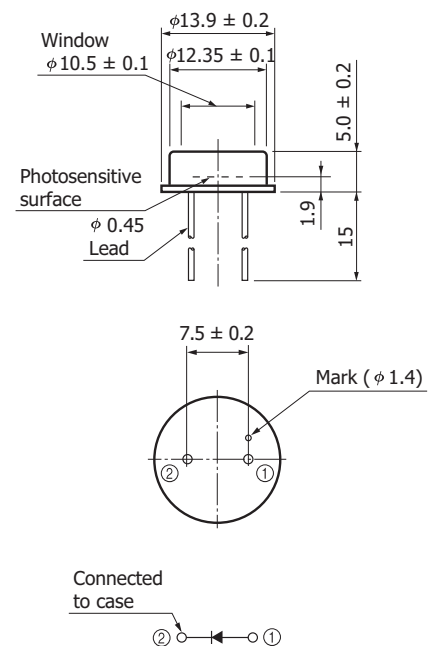


Dimensional outline (unit: mm)

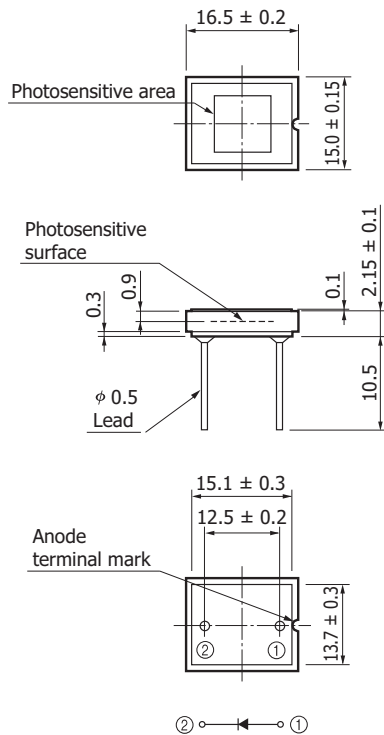
① G1126-02



② G1127-02



③ G2119



KGPD0011EA

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.

Type numbers of products listed in the delivery specification sheets or supplied as samples may have a suffix "(X)" which means preliminary specifications or a suffix "(Z)" which means developmental specifications.

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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