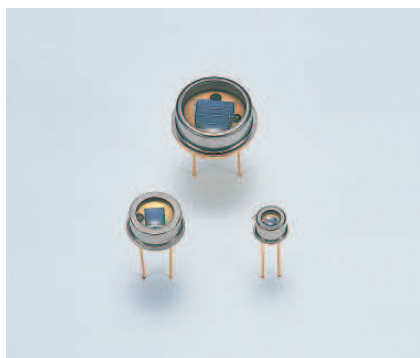




GaP photodiode

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			

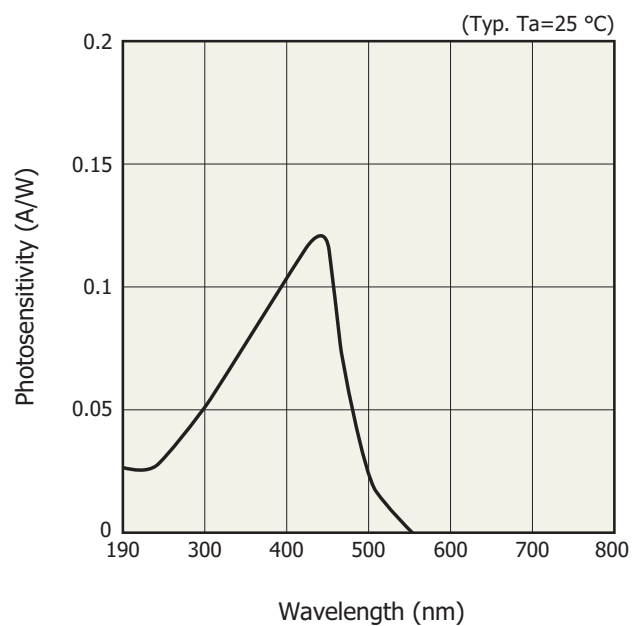
* Window material Q: quartz glass

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.

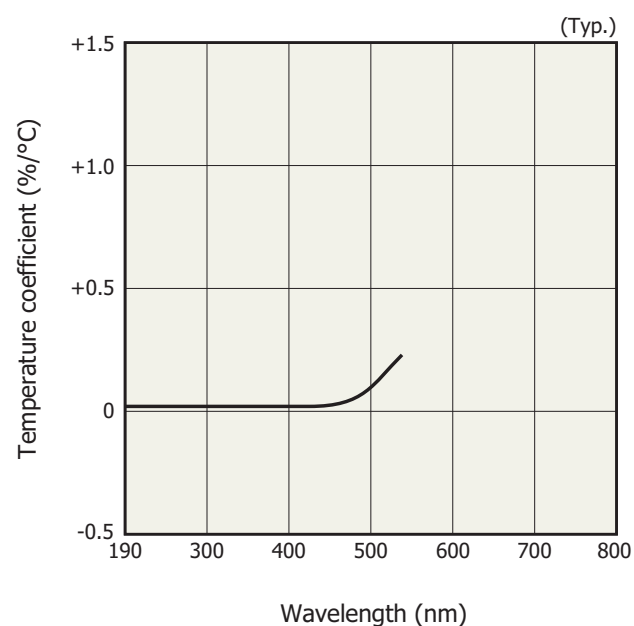
Electrical and optical characteristics (Typ. T_a=25 °C, unless otherwise noted)

Type no.	Spectral response range λ	Peak sensitivity wavelength λp	Photosensitivity S (A/W)			Short circuit current Isc 1000 lx		Dark current ID max.		Temp. coefficient of ID TCID	Rise time tr VR=0 V RL=1 kΩ	Terminal capacitance Ct VR=0 V f=10 kHz	Shunt resistance Rsh VR=10 mV		Noise equivalent power NEP
			λp	Hg line 254 nm	400 nm								Min. (μA)	Typ. (μA)	
		(nm)	(nm)											(times/°C)	
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		10	1500	2	20	7.6 × 10 ⁻¹⁵
G1963						0.75	0.9	10	100		30	5000	1	1	1.1 × 10 ⁻¹⁴

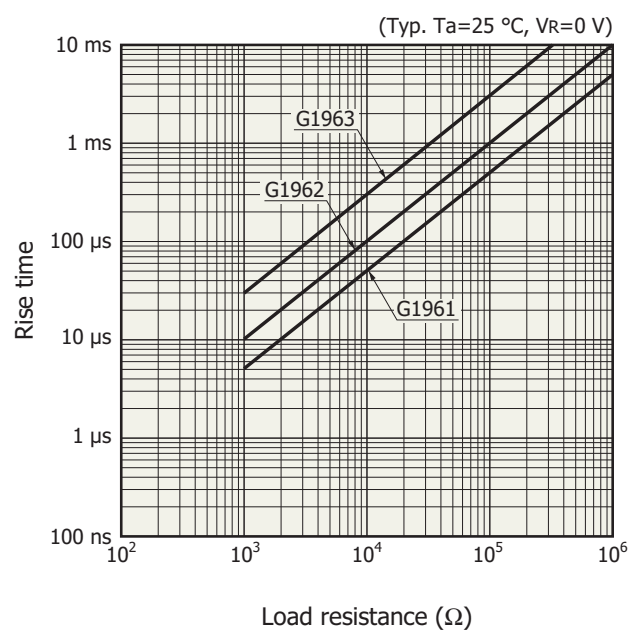
Spectral response



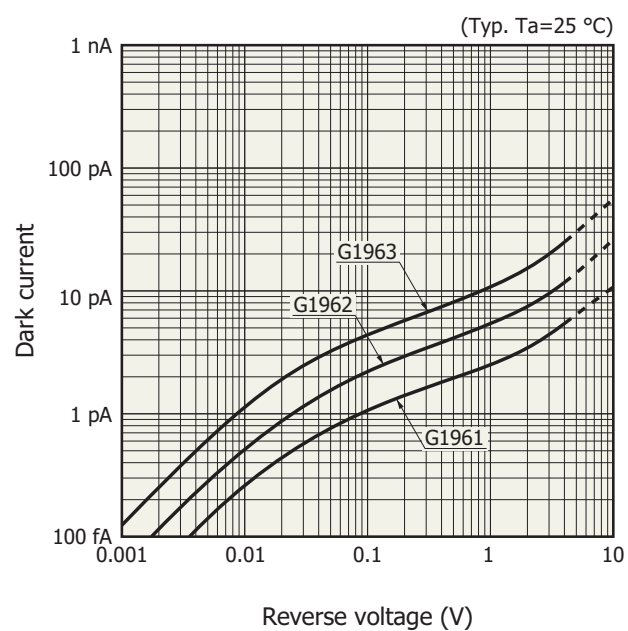
Photosensitivity temperature characteristic



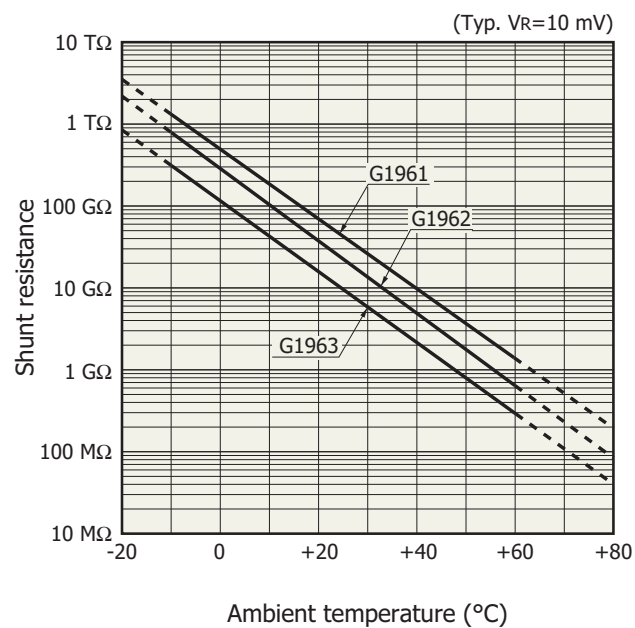
Rise time vs. load resistance



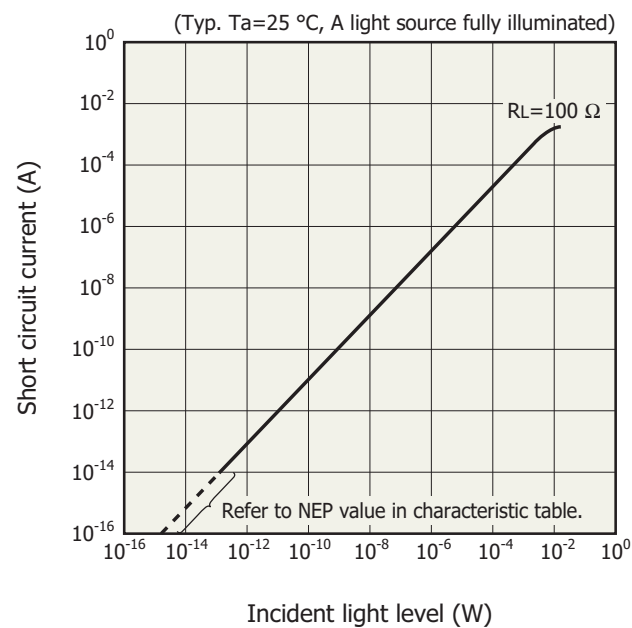
Dark current vs. reverse voltage



Shunt resistance vs. ambient temperature

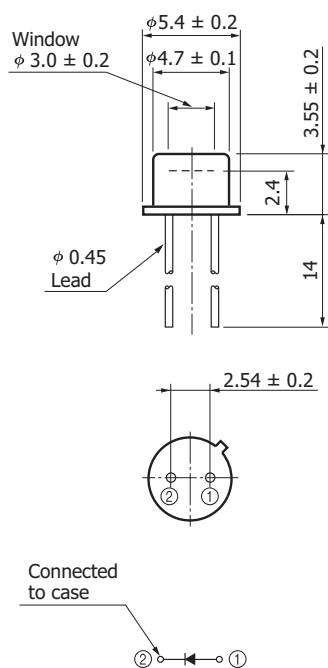


Short circuit current linearity

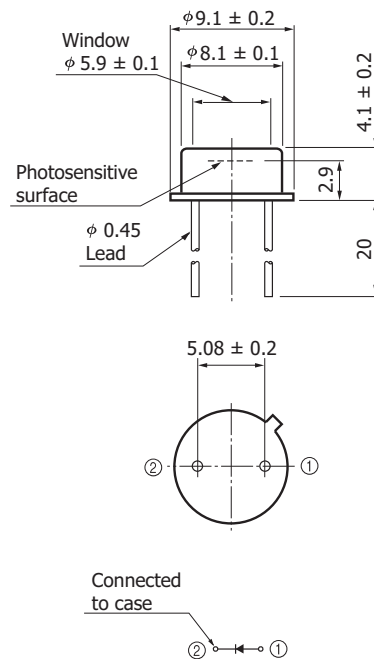


Dimensional outline (unit: mm)

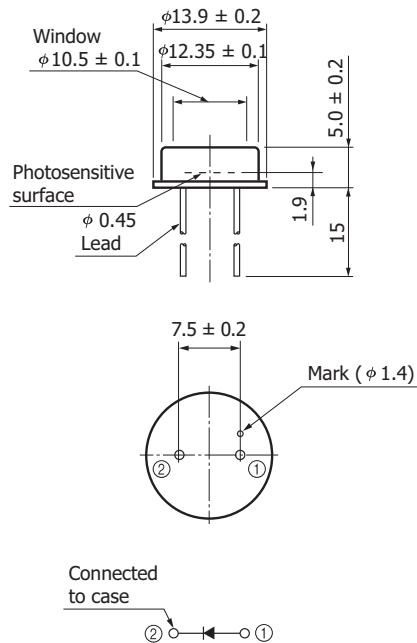
① G1961



② G1962



③ G1963



KGPD0034EA

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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HAMAMATSU

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HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Higashi-ku, Hamamatsu City, 435-8558 Japan, Telephone: (81) 53-434-3311, Fax: (81) 53-434-5184

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 8152-375-0, Fax: (49) 8152-265-8

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trépu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Thorshamnsgatan 35 16440 Kista, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1 int. 6, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741

China: Hamamatsu Photonics (China) Co., Ltd.: 1201 Tower B, Jiaming Center, No.27 Dongsanhuan Beilu, Chaoyang District, Beijing 100020, China, Telephone: (86) 10-6586-6006, Fax: (86) 10-6586-2866