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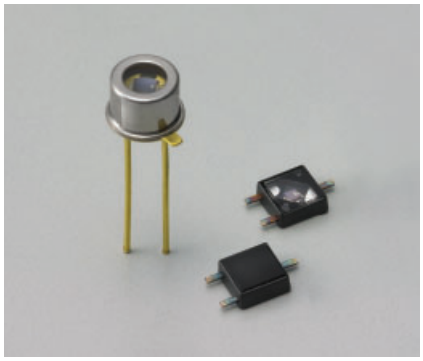
PHOTON IS OUR BUSINESS

GaAsP photodiodes



G5645 G5842 G6262

Diffusion type photodiodes with sensitivity in the short wavelength regions (less affected by 2nd order light)

Features

- **Low dark current**
- **Narrow spectral response range**

Applications

- **Analytical instruments**
- **UV detection**

General ratings/Absolute maximum ratings

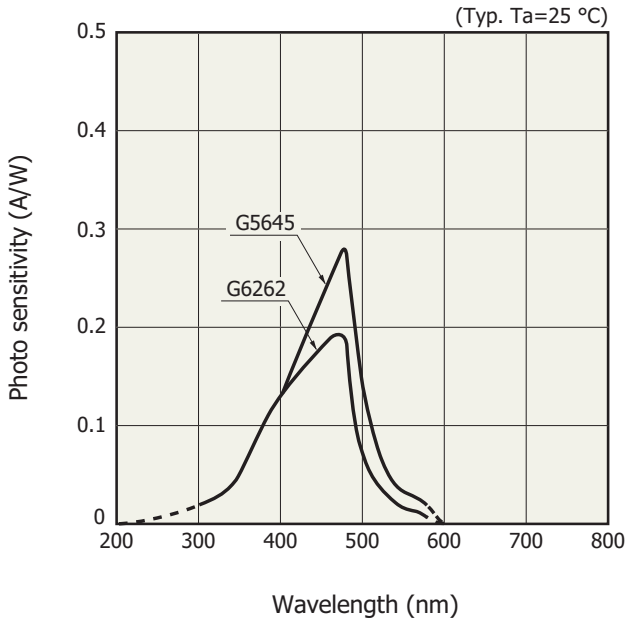
Type No.	Dimensional outline/ Window material	Package	Active area size (mm)	Effective active area (mm^2)	Absolute maximum ratings		
					Reverse voltage V_R Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G5645	①/K *	TO-18	0.8 × 0.8	0.58	5	-30 to +80	-40 to +85
G5842	②	Plastic					
G6262	②	Plastic					

* Borosilicate glass

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

Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λp (nm)	Photo sensitivity S (A/W)		Short circuit current Isc 1000 lx		Dark current I_D V_R=5 V Max. (pA)	Temp. coefficient of I_D T_{CID} (times/°C)	Rise time tf V_R=0 V R_L=1 kΩ (μs)	Terminal capacitance Ct V_R=0 V f=10 kHz (pF)	Shunt resistance Rsh V_R=10 mV		NEP (W/$Hz^{1/2}$)
			λp	GaP LED 560 nm	Min. (nA)	Typ. (nA)					Min. (GΩ)	Typ. (GΩ)	
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}

Spectral response



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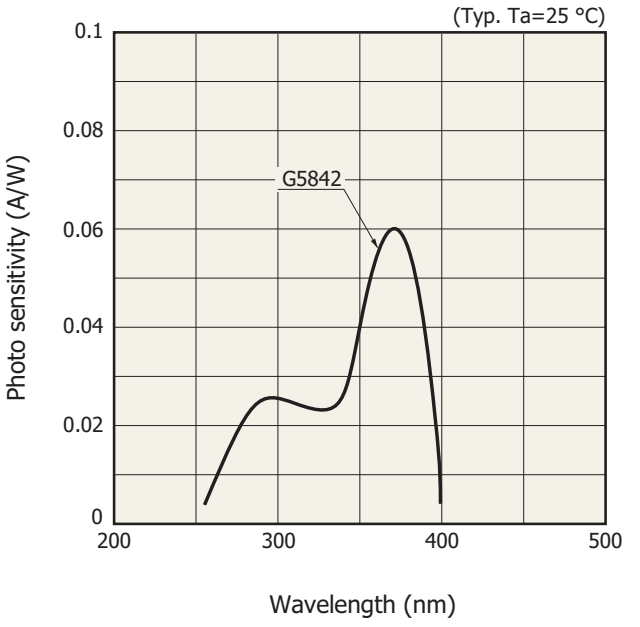

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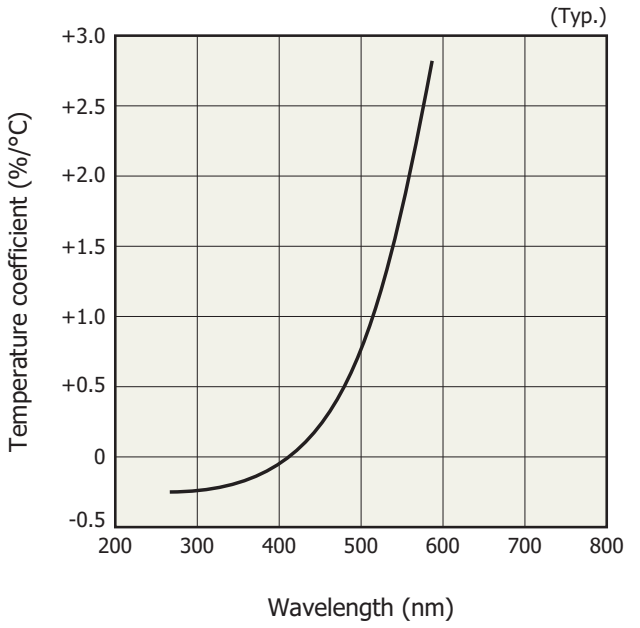
Photo sensitivity temperature characteristic



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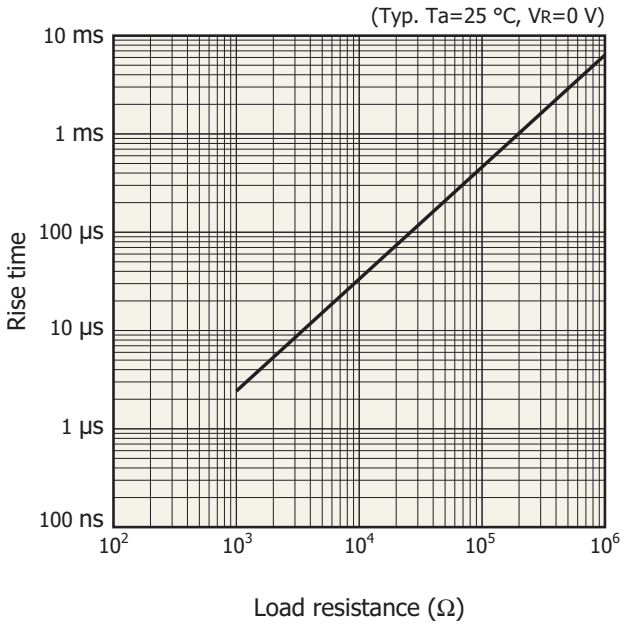
Rise time vs. load resistance



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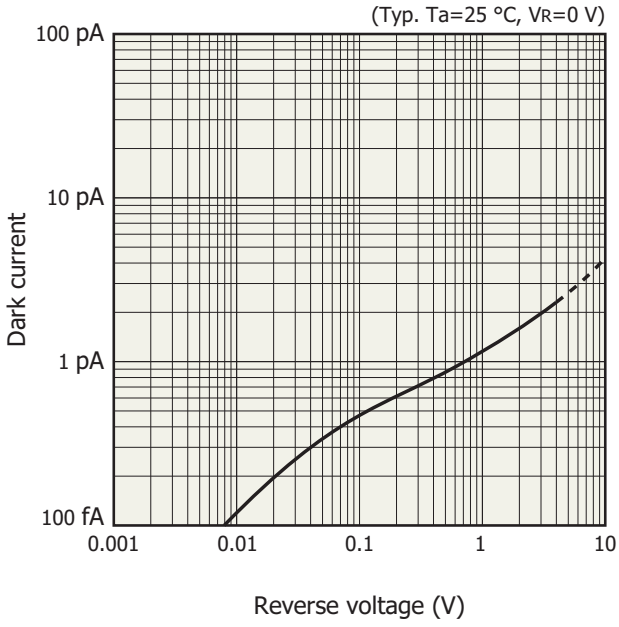
Dark current vs. reverse voltage



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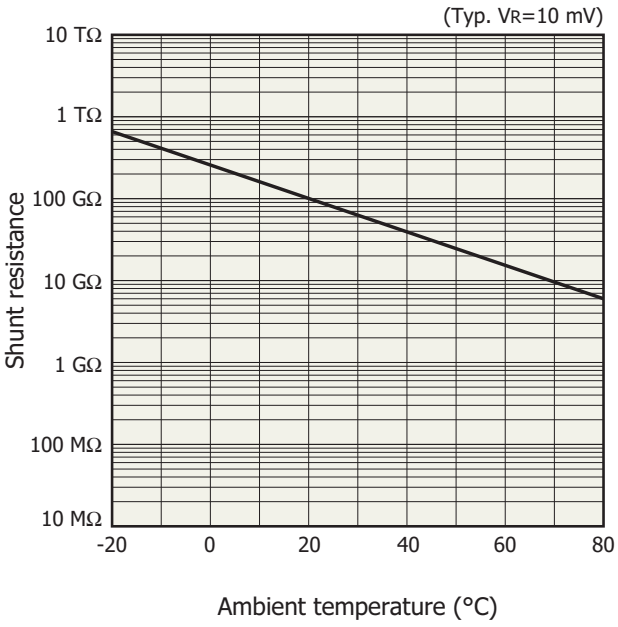
Shunt resistance vs. ambient temperature



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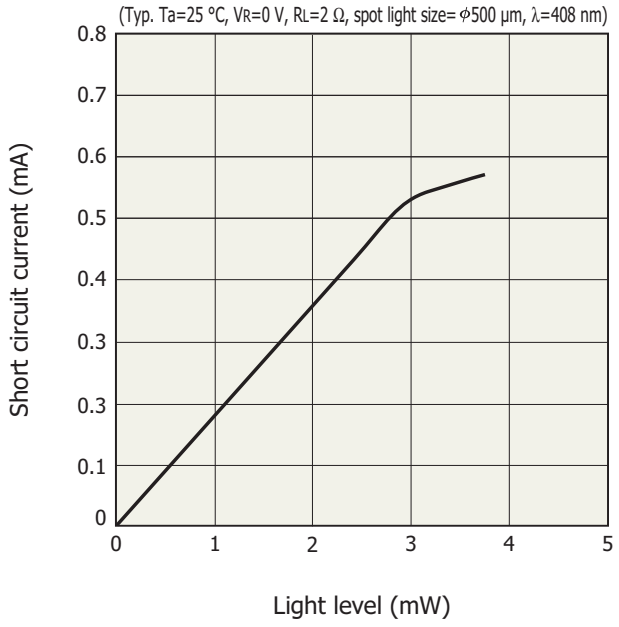
Short circuit current linearity (G5645, G6262)



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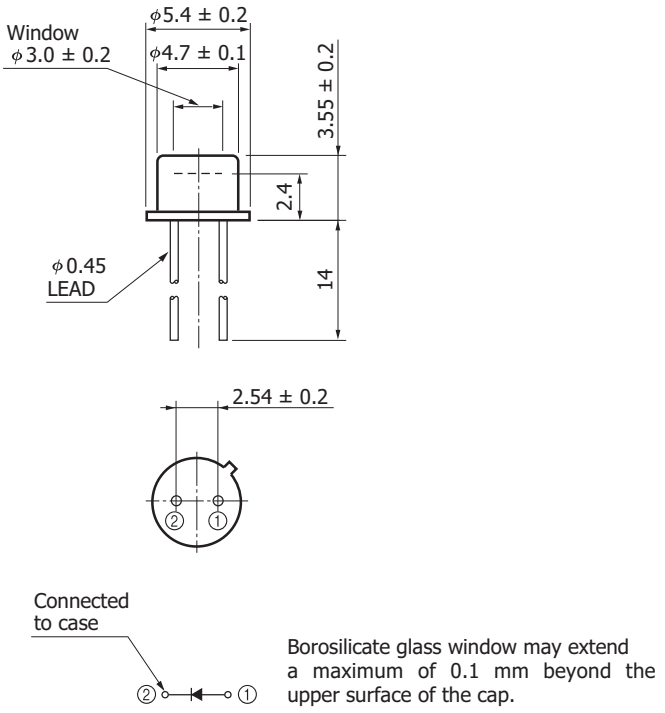
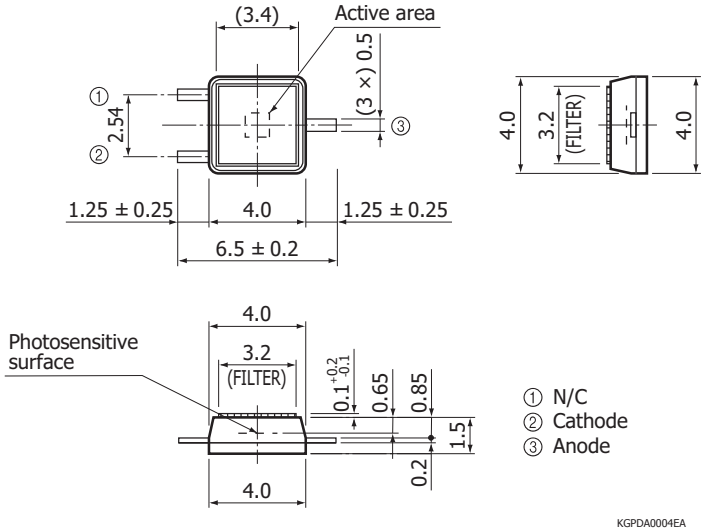
Dimensional outlines (unit: mm)

① G5645



② G5842, G6262



Information described in this material is current as of April, 2011. 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.

HAMAMATSU www.hamamatsu.com

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 Trapu, 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: Smidesvägen 12, SE-171 41 Solna, 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