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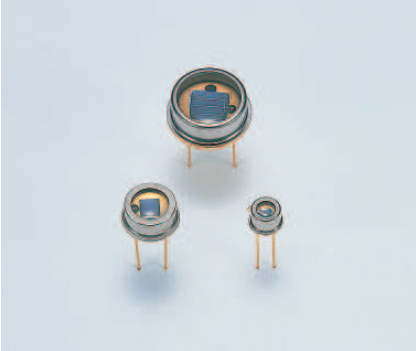
PHOTON IS OUR BUSINESS

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 (mm²)	Absolute maximum ratings		
					Reverse voltage VR max (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°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			

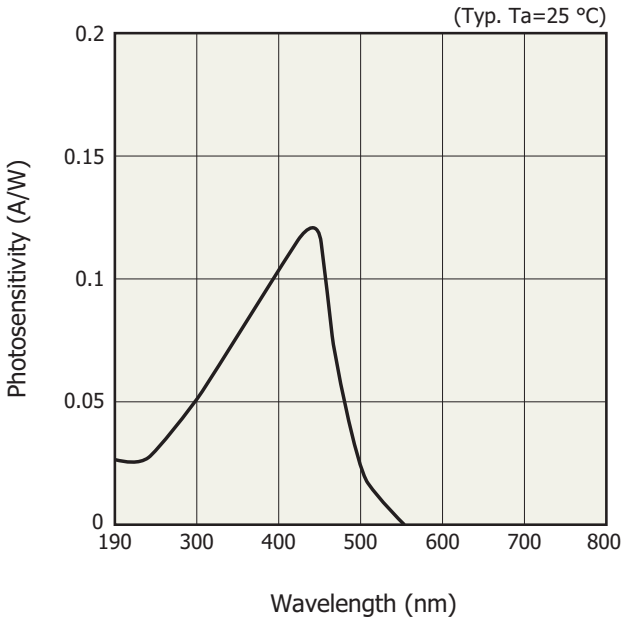
* Window material Q: quartz glass

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. Ta=25 °C, unless otherwise noted)

Type no.	Spectral response range λ (nm)	Peak sensitivity wavelength λp (nm)	Photosensitivity S (A/W)			Short circuit current Isc 1000 lx		Dark current ID max.		Temp. coefficient of ID TCID (times/°C)	Rise time tr VR=0 V RL=1 kΩ (μs)	Terminal capacitance Ct VR=0 V f=10 kHz (pF)	Shunt resistance Rsh VR=10 mV		Noise equivalent power NEP (W/Hz^1/2)
			λp	Hg line 254 nm	400 nm	Min. (μA)	Typ. (μA)	VR=10 mV (pA)	VR=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		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



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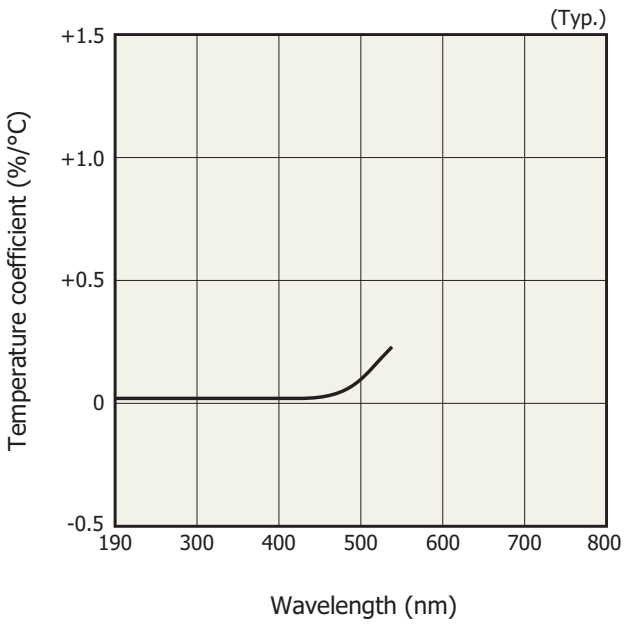
Photosensitivity temperature characteristic



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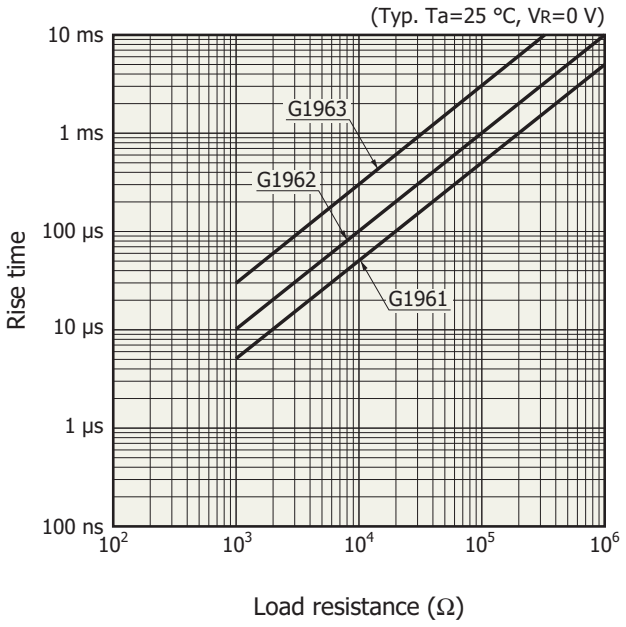
Rise time vs. load resistance



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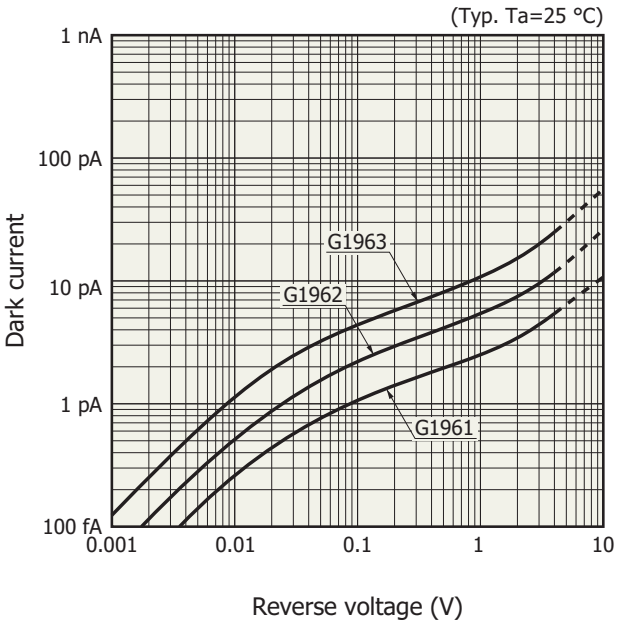
Dark current vs. reverse voltage



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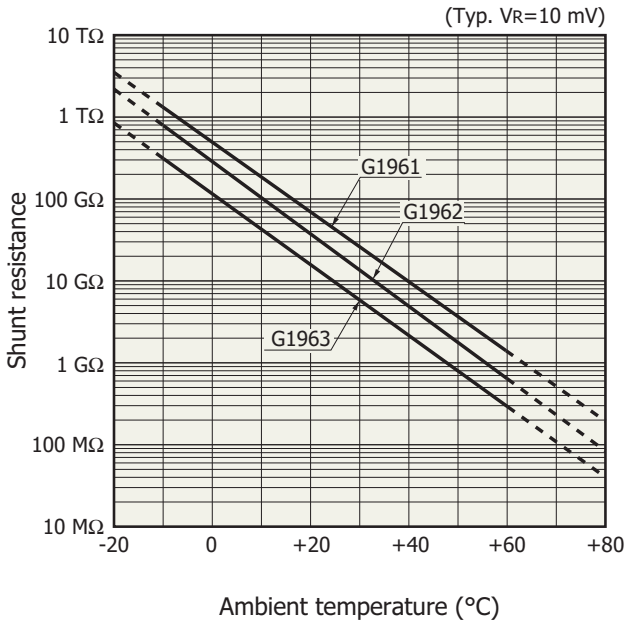
Shunt resistance vs. ambient temperature



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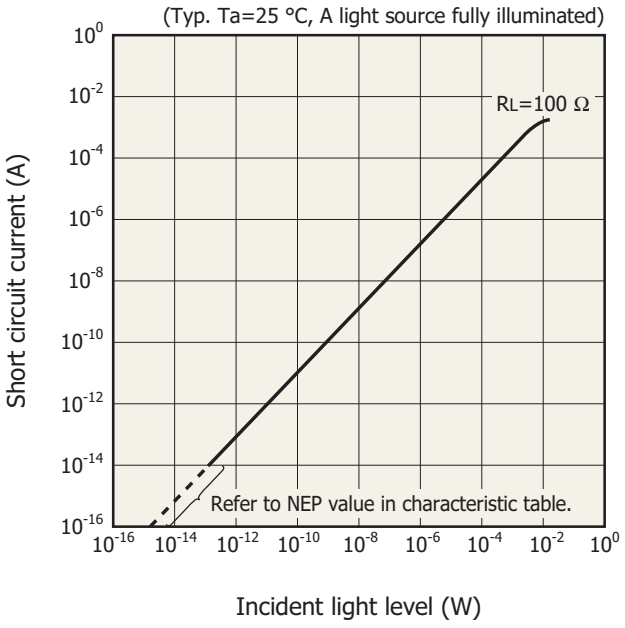
Short circuit current linearity



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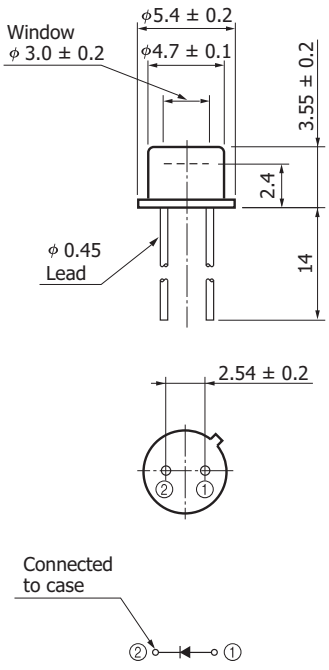
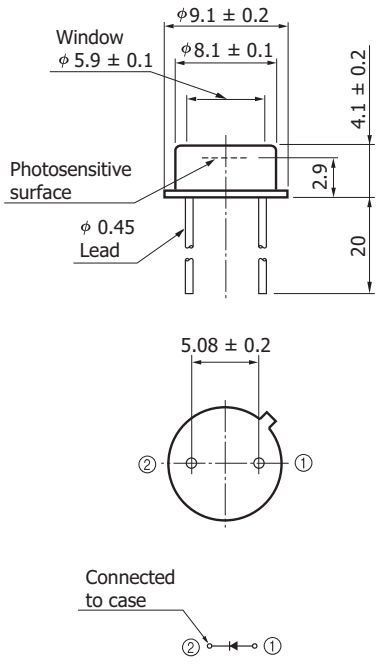
Dimensional outline (unit: mm)

① G1961



② G1962



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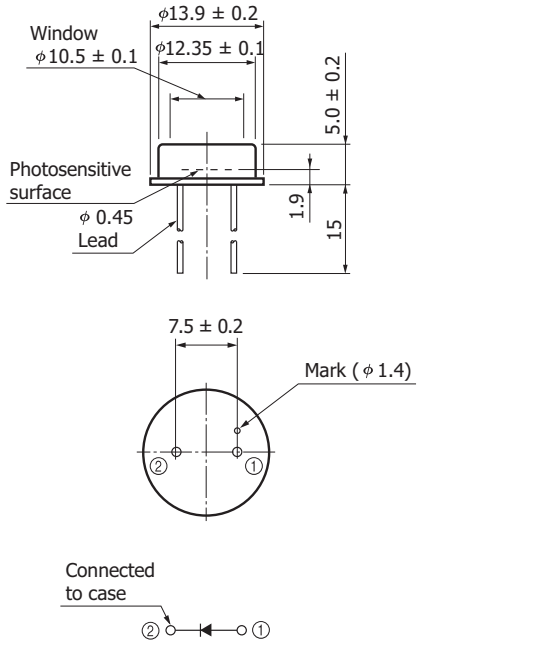
③ G1963



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