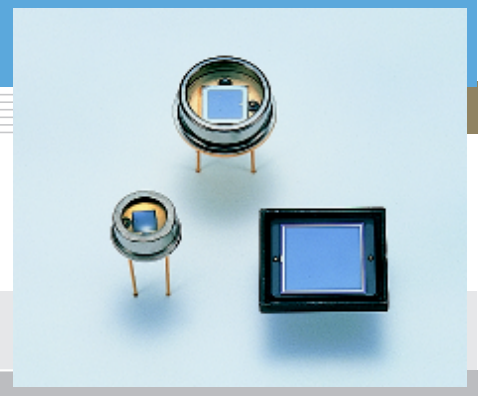


GaAsP photodiode

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

General ratings / Absolute maximum ratings

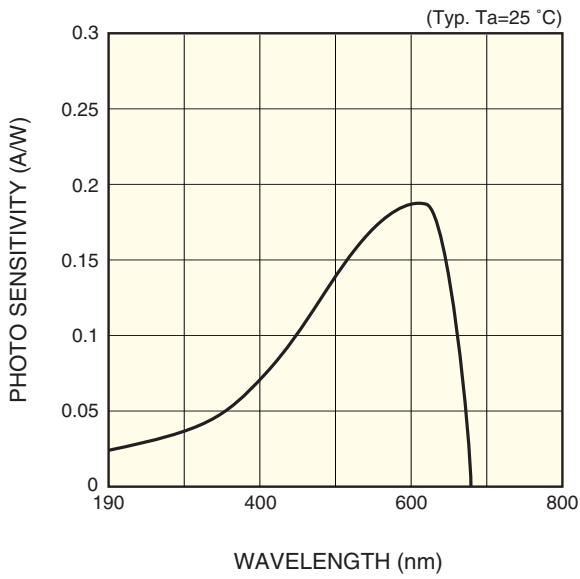
Type No.	Dimensional outline/ Window material	Package	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G1126-02	①/Q *	TO-5	2.3 × 2.3	5.2	5	-10 to +60	-20 to +70
G1127-02	②/Q	TO-8	4.6 × 4.6	21			
G2119	③/Q	Ceramic	10.1 × 10.1	98			

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

Type No.	Spectral response range λ (nm)	Peak sensitivity wave-length λ_p (nm)	Photo sensitivity S (A/W)				Short circuit current Isc 100 lx		Dark current ID Max.		Temp. coefficient of ID TCID (times/°C)	Rise time tr VR=0 V RL=1 k Ω (μ s)	Terminal capacitance Ct VR=0 V f=10 kHz (pF)	Shunt resistance Rsh VR=10 mV		NEP (W/Hz ^{1/2})
			λ_p	Hg line 254 nm	GaP LED 560 nm	He-Ne laser 633 nm	Min. (μ A)	Typ. (μ A)	VR=10 mV (pA)	VR=1 V (pA)				Min. (G Ω)	Typ. (G Ω)	
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				1	8	8.0×10^{-15}
G2119							5	6	100	5000				0.1	0.7	2.4×10^{-14}

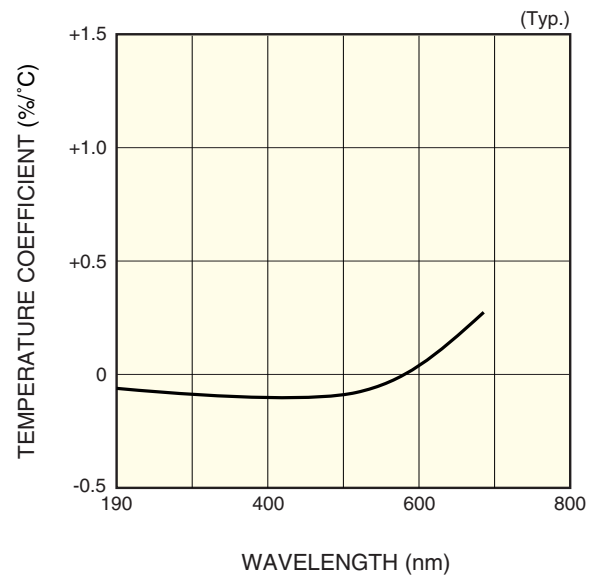
* Window material Q: quartz glass

■ Spectral response



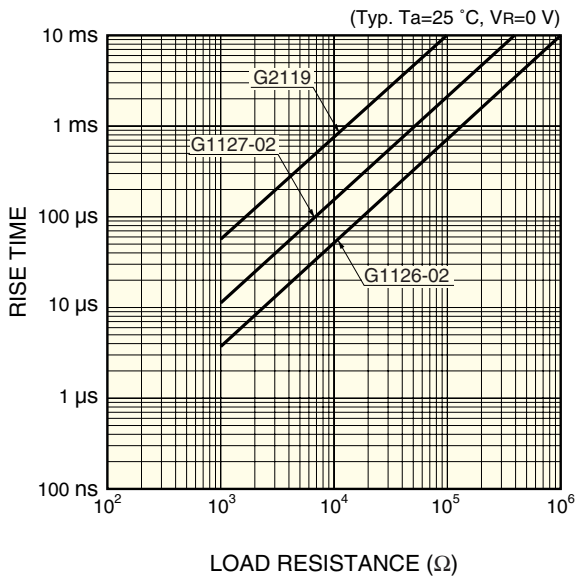
KGPDB0034EA

■ Photo sensitivity temperature characteristic



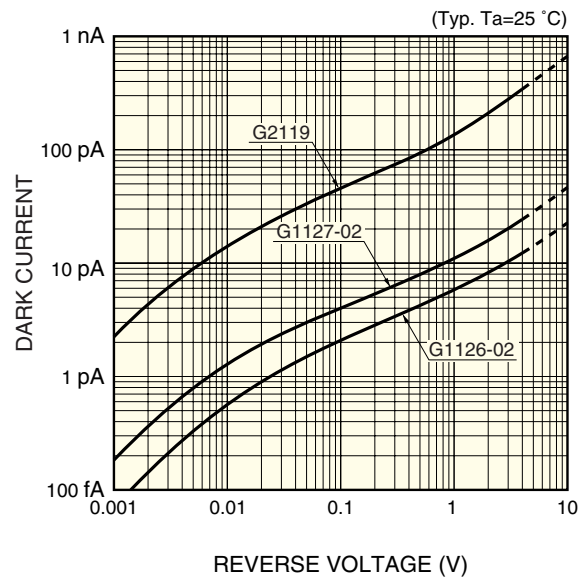
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■ Rise time vs. load resistance



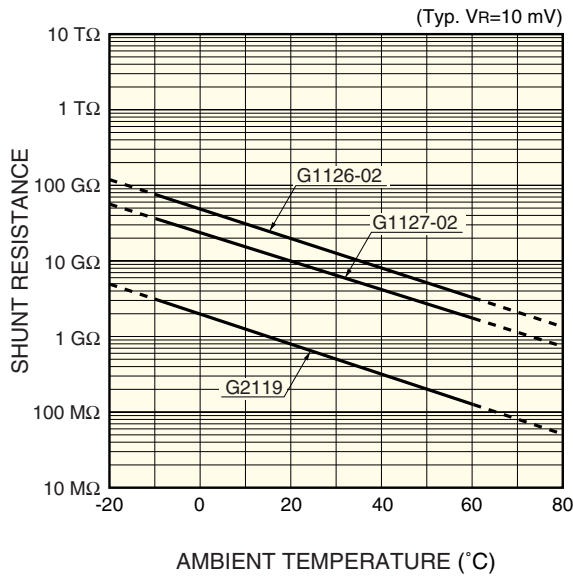
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■ Dark current vs. reverse voltage



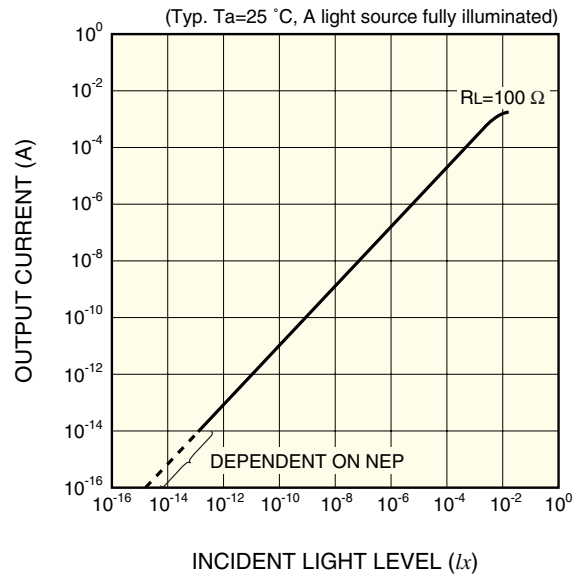
KGPDB0037EA

■ Shunt resistance vs. ambient temperature



KGPDB0038EA

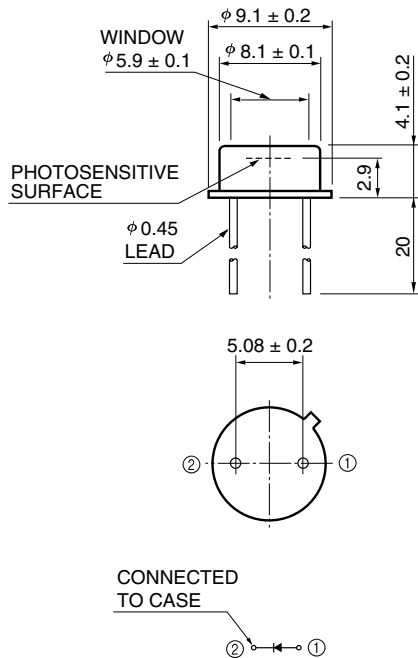
■ Short circuit current linearity



KGPDB0008EA

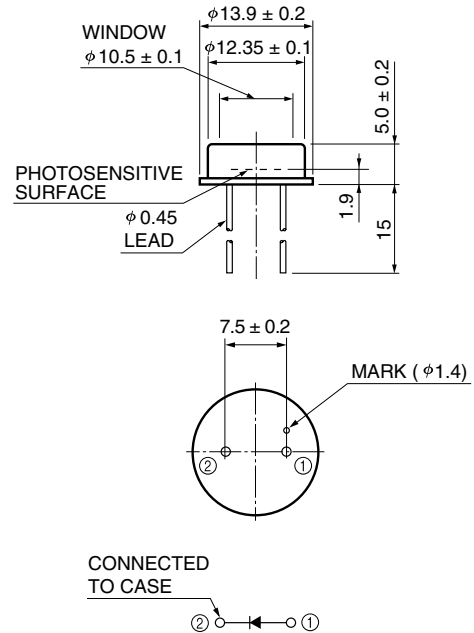
■ Dimensional outlines (unit: mm)

① G1126-02



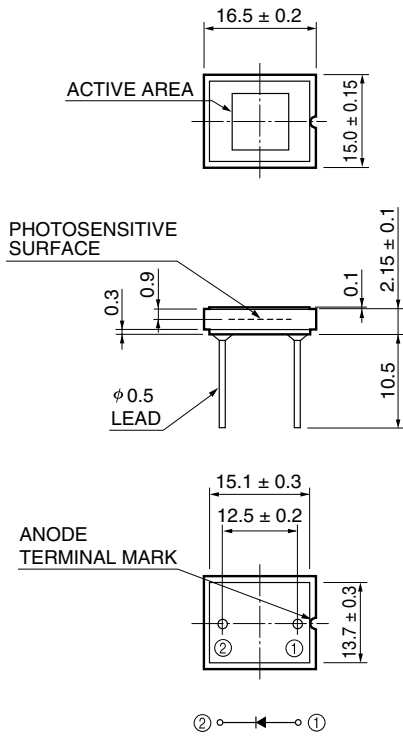
KGPDA0006EA

② G1127-02



KGPDA0007EA

③ G2119



KGPD0011EA

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