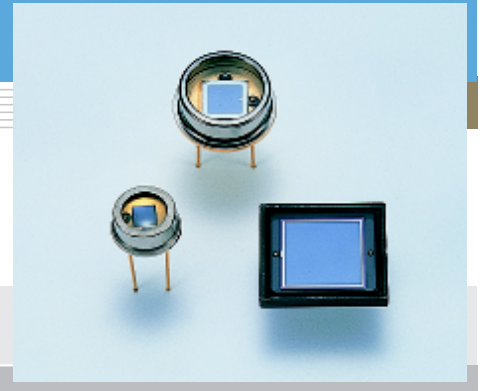


# GaAsP photodiode

## 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

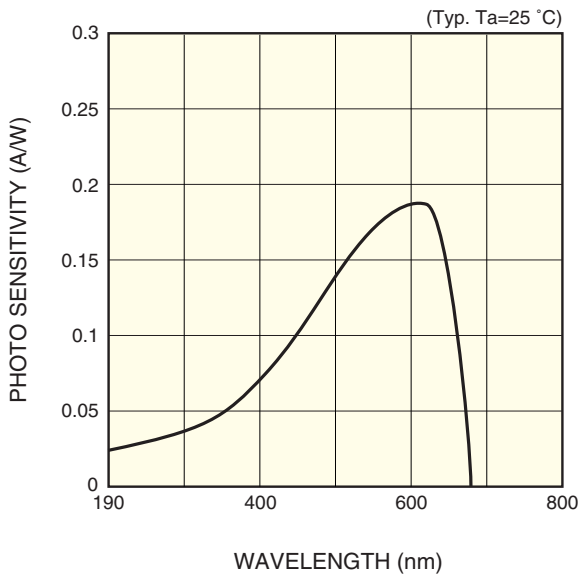
Type No.	Dimensional outline/ Window material	Package	Active area size (mm)	Effective active area (mm <sup>2</sup> )	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G1126-02	①/Q *	TO-5	2.3 × 2.3	5.2	5	-10 to +60	-20 to +70
G1127-02	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 $\lambda$ (nm)	Peak sensitivity wave-length $\lambda_p$ (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 $\Omega$ ( $\mu$ s)	Terminal capacitance Ct VR=0 V f=10 kHz (pF)	Shunt resistance Rsh VR=10 mV		NEP (W/Hz <sup>1/2</sup> )
			$\lambda_p$	Hg line 254 nm	GaP LED 560 nm	He-Ne laser 633 nm	Min. ( $\mu$ A)	Typ. ( $\mu$ A)	VR=10 mV (pA)	VR=1 V (pA)				Min. (G $\Omega$ )	Typ. (G $\Omega$ )	
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	$5.8 \times 10^{-15}$
G1127-02							0.9	1.2	10	100				1	8	$8.0 \times 10^{-15}$
G2119							5	6	100	5000				0.1	0.7	$2.4 \times 10^{-14}$

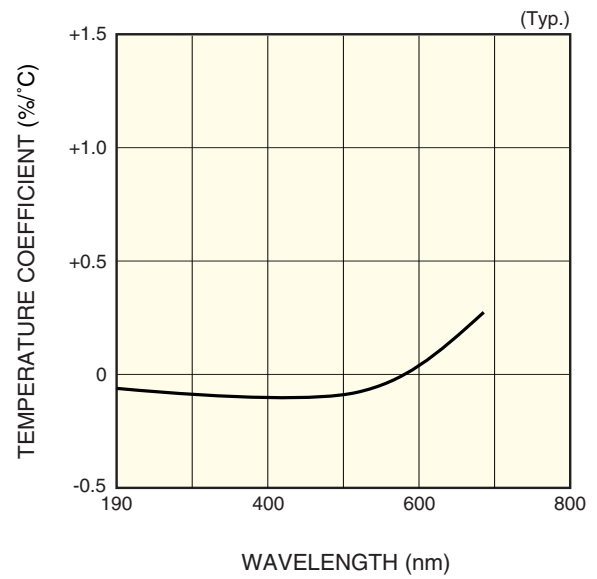
\* Window material Q: quartz glass

■ Spectral response



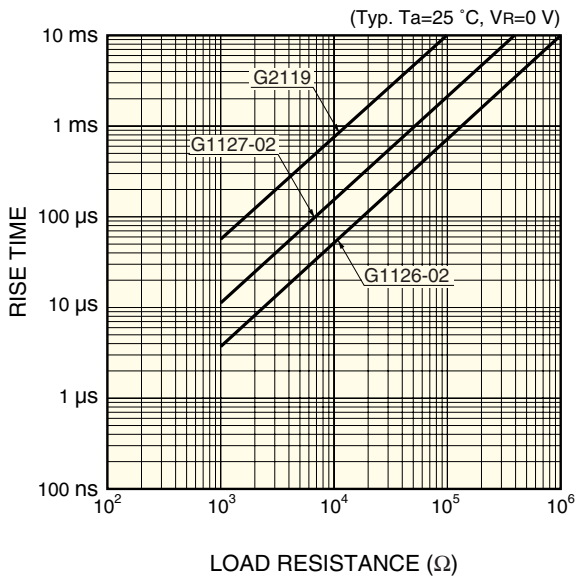
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■ Photo sensitivity temperature characteristic



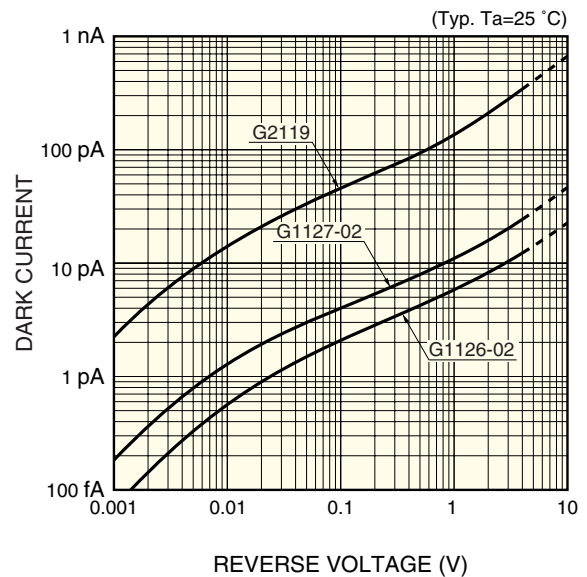
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■ Rise time vs. load resistance



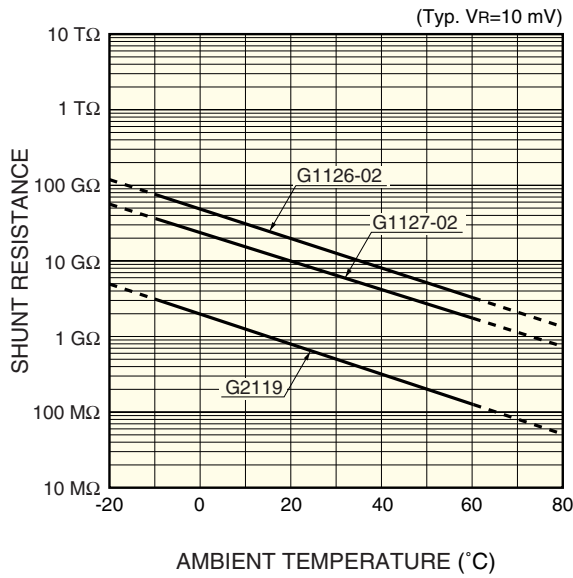
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■ Dark current vs. reverse voltage



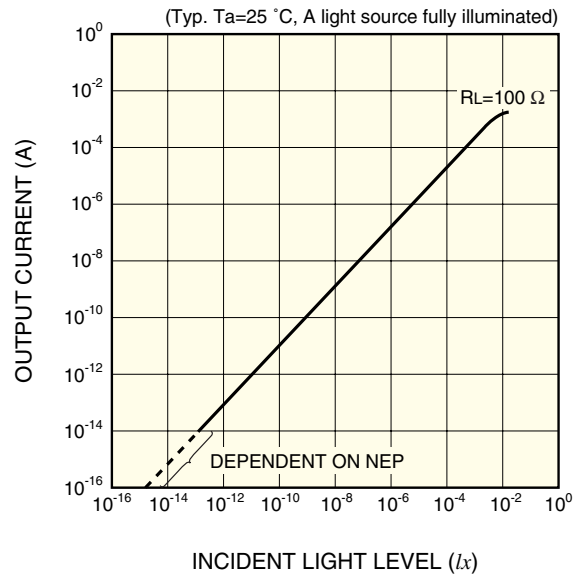
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■ Shunt resistance vs. ambient temperature



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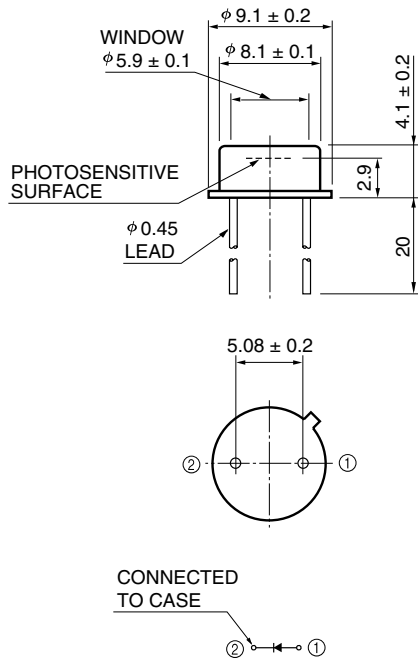
■ Short circuit current linearity



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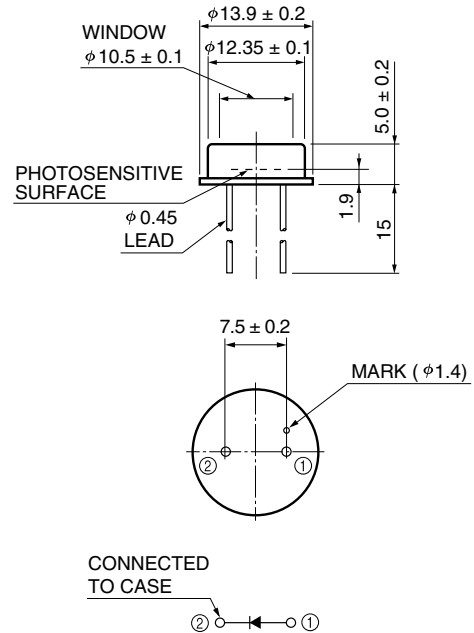
■ Dimensional outlines (unit: mm)

① G1126-02



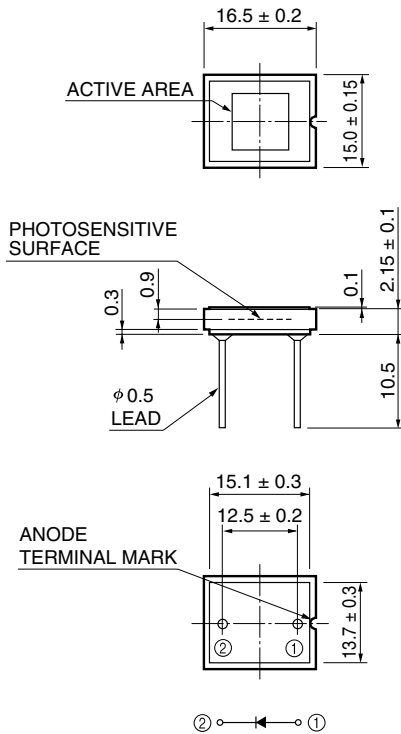
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② G1127-02



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③ G2119



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