

# PNA3W01L (PN307)

## Silicon planar type

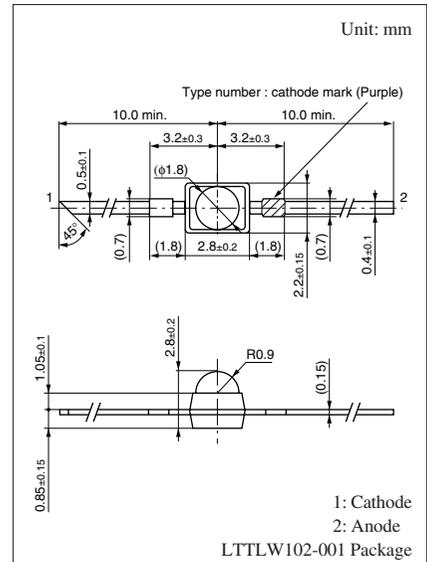
For optical control systems

### ■ Features

- High sensitivity, high reliability
- Peak emission wavelength matched with infrared light emitting diodes:  $\lambda_p = 800 \text{ nm}$  (typ.)
- Double end type small size package

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Power dissipation	$P_D$	10	mW
Operating ambient temperature	$T_{opr}$	-25 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-30 to +100	$^\circ\text{C}$



### ■ Electrical-Optical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Dark current	$I_D$	$V_R = 10 \text{ V}$			50	nA
Photocurrent *1	$I_L$	$V_R = 10 \text{ V}, L = 1000 \text{ lx}$	5			$\mu\text{A}$
Peak emission wavelength	$\lambda_p$	$V_R = 10 \text{ V}$		800		nm
Rise time *2	$t_r$	$V_R = 10 \text{ V}, R_L = 1 \text{ k}\Omega$		50		ns
Fall time *2	$t_f$			50		ns
Rise time *2	$t_r$	$V_R = 10 \text{ V}, R_L = 100 \text{ k}\Omega$		5		$\mu\text{s}$
Fall time *2	$t_f$			5		$\mu\text{s}$
Half-power angle	$\theta$	The angle from which photocurrent becomes 50%		24		$^\circ$

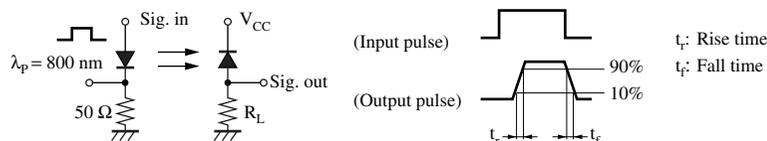
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Spectral sensitivity characteristics: Sensitivity for wave length over 400 nm maximum sensitivity ratio is 100%.

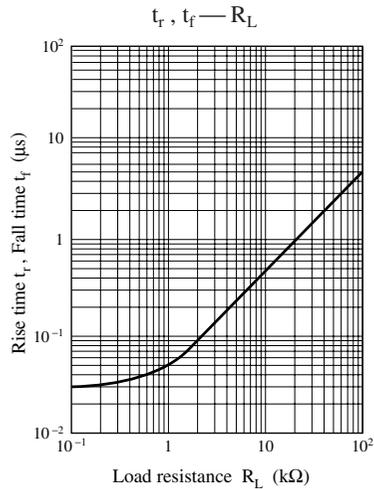
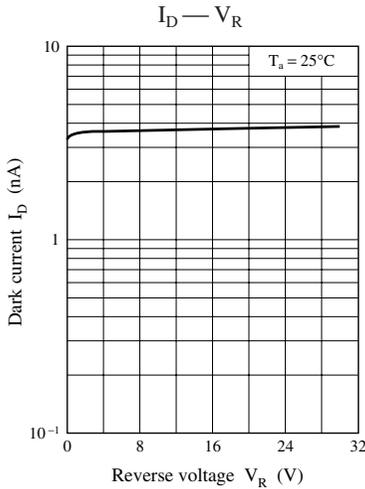
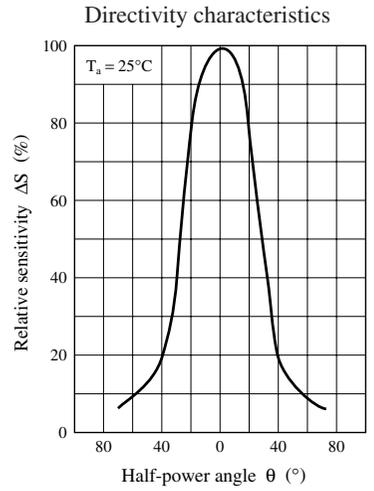
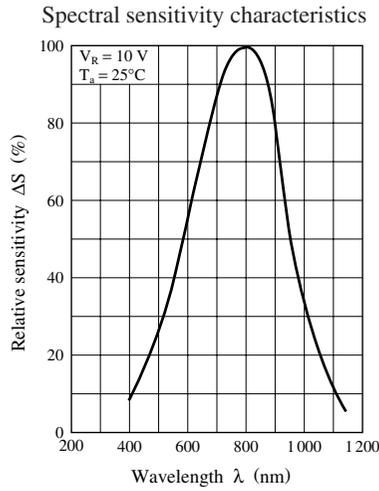
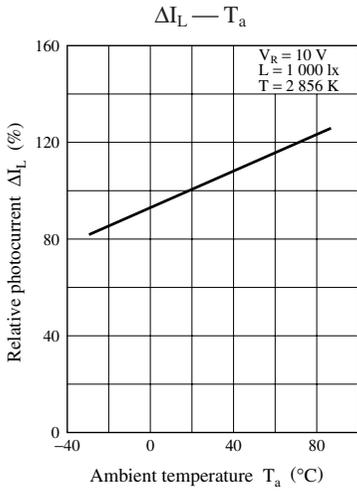
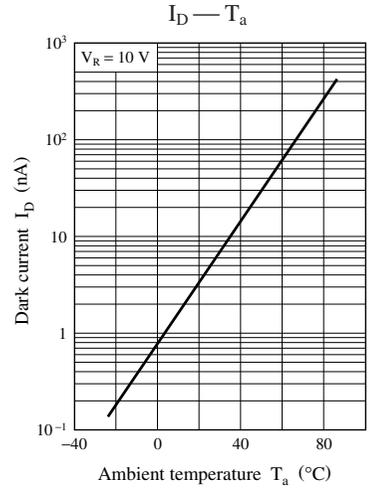
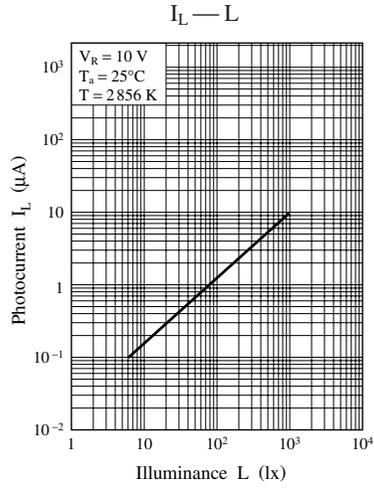
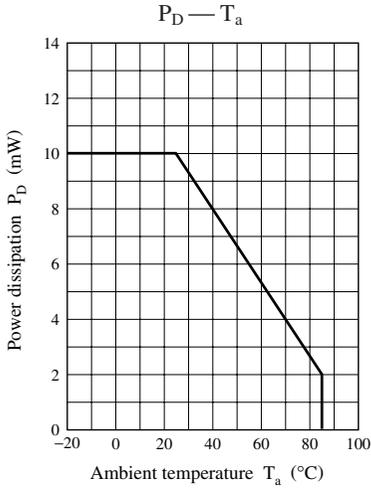
3. This device is designed by disregarded radiation.

4. \*1: Source: Tungsten (color temperature 2856 K)

\*2: Switching time measurement circuit



Note) The part number in the parenthesis shows conventional part number.



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