

PNA3W01L (PN307)

Silicon planar type

For optical control systems

■ Features

- High sensitivity, high reliability
- Peak sensitivity wavelength matched with infrared light emitting diodes: $\lambda_{PD} = 800 \text{ nm}$ (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	$^\circ\text{C}$

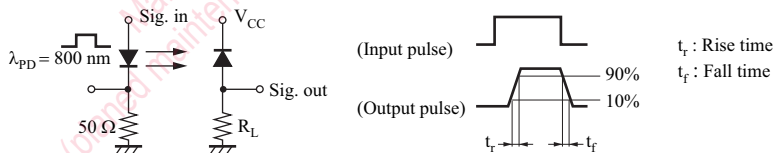
■ Electrical-Optical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Photocurrent *1	I_L	$V_R = 10 \text{ V}, L = 1000 \text{ lx}$	5			μA
Drain current	I_D	$V_R = 10 \text{ V}$			50	nA
Peak sensitivity wavelength	λ_{PD}	$V_R = 10 \text{ V}$		800		nm
Half-power angle	θ	The angle when the photocurrent is halved		24		$^\circ$
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		μs
Fall time *2	t_f			5		μs

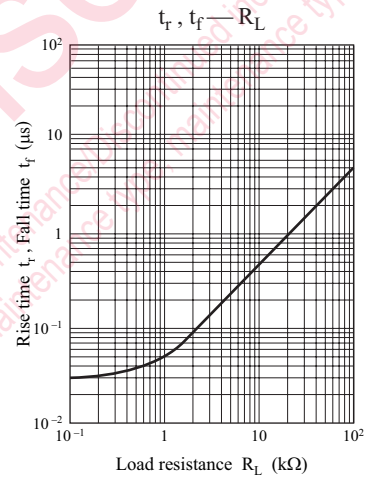
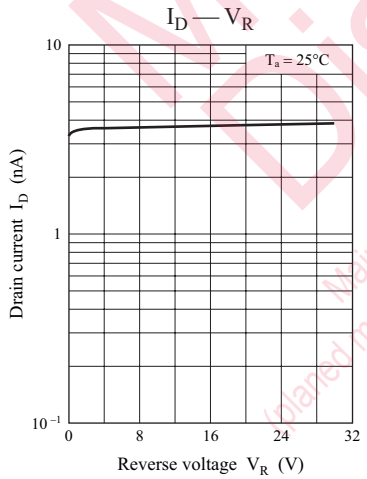
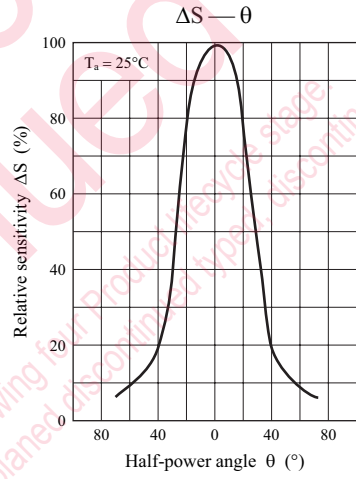
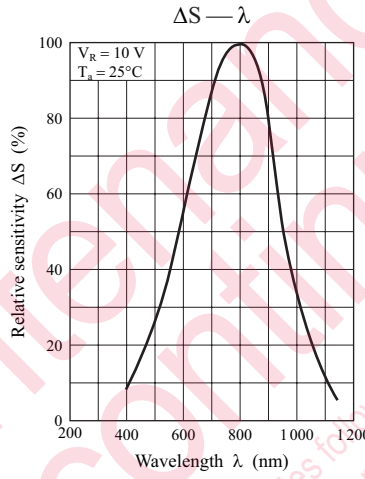
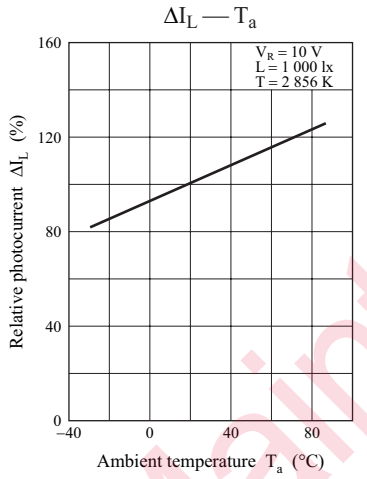
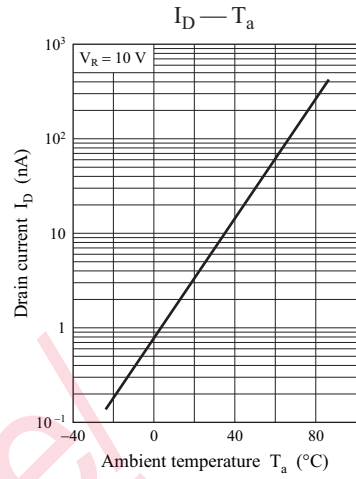
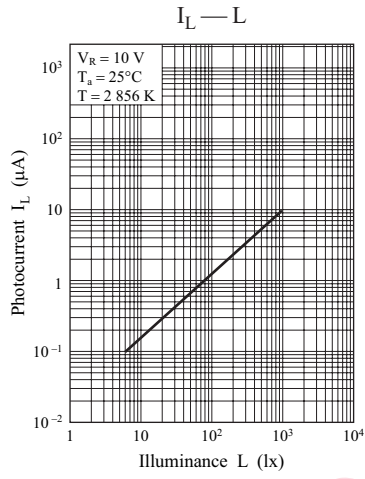
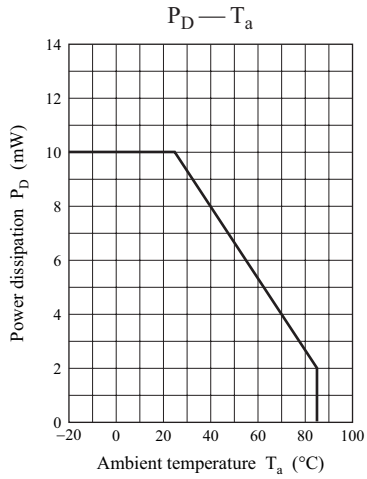
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Spectral sensitivity characteristics: Sensitivity for wave length over 400 nm maximum sensitivity ratio is 100%.
3. This device is designed by disregarding radiation.
4. *1: Source: Tungsten lamp (color temperature 2 856K)

*2: Switching time measurement circuit

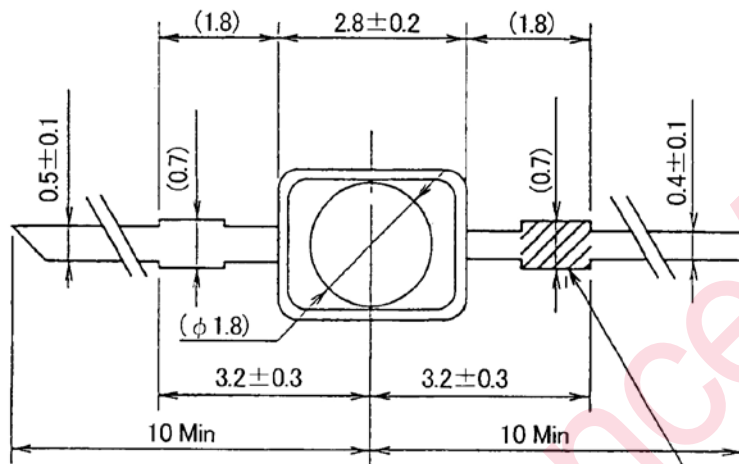


Note) The part number in the parenthesis shows conventional part number.

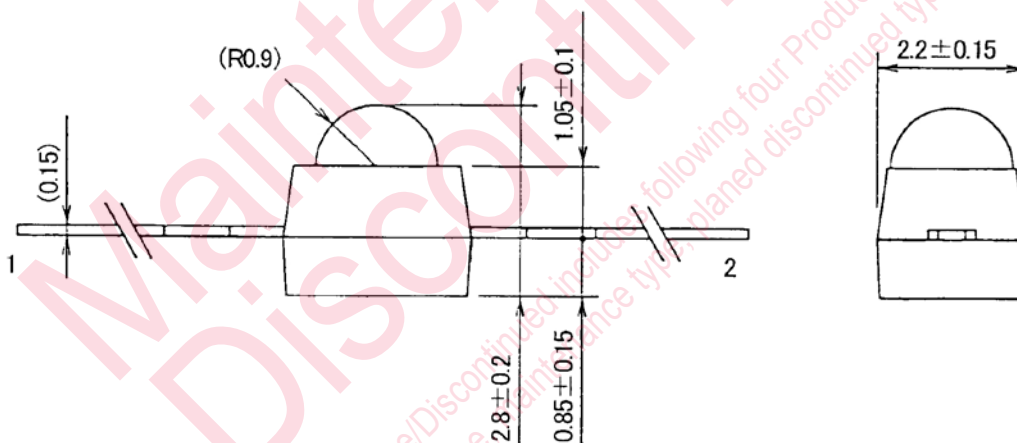


■ Package (Unit: mm)

LPTLTN2S0001



品名・極性カラー表示：紫色
Type number · Anode mark : Purple



(注1) 色表示は、目視又は顕微鏡に於いて解読できる事。

(Note1) What a color mark sees an attention and can decode in a microscope.

- Pin name
- 1: Cathode
- 2: Anode

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