

PNA2W01M (PN207)

Silicon planar type

For optical control systems

■ Features

- High sensitivity
- Easy to combine with red and infrared light emitting diodes
- Small size designed for easier mounting to printed circuit board

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

Parameter	Symbol	Rating	Unit
Collector-emitter voltage (Base open)	V_{CEO}	20	V
Emitter-collector voltage (Base open)	V_{ECO}	5	V
Collector current	I_C	30	mA
Collector power dissipation	P_C	100	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	$V_{CE} = 10\text{ V}, L = 2\text{ lx}$	0.5	3.0		mA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 10\text{ V}$		0.1	0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_L = 1\text{ mA}, L = 100\text{ lx}$		0.7	1.5	V
Peak sensitivity wavelength *1	λ_{PD}	$V_{CE} = 10\text{ V}$		800		nm
Half-power angle	θ	The angle when the photocurrent is halved		18		$^\circ$
Rise time *2	t_r	$V_{CC} = 10\text{ V}, I_L = 5\text{ mA}, R_L = 100\ \Omega$		200		μs
Fall time *2	t_f			200		μs

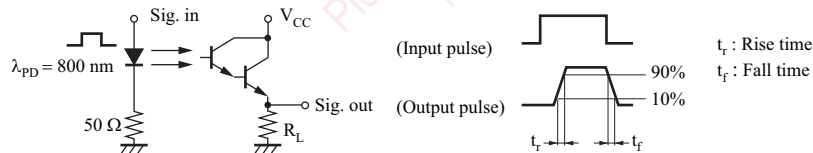
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

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

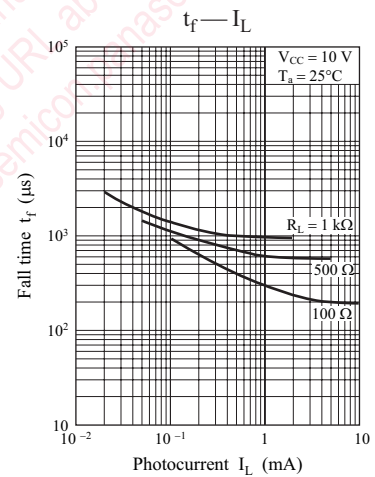
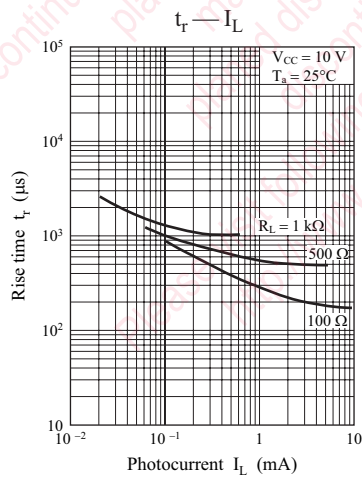
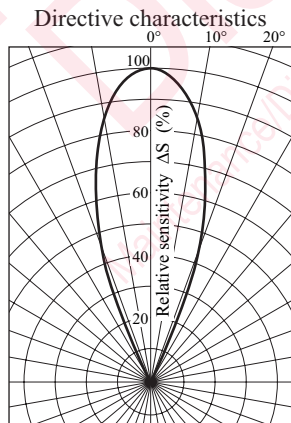
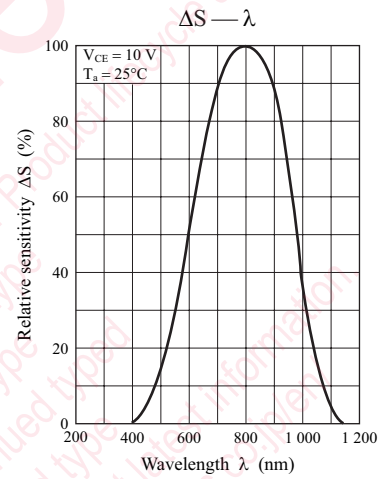
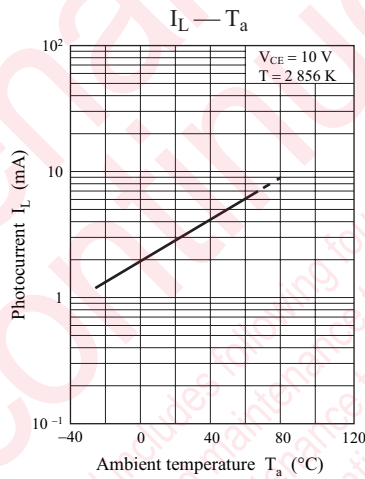
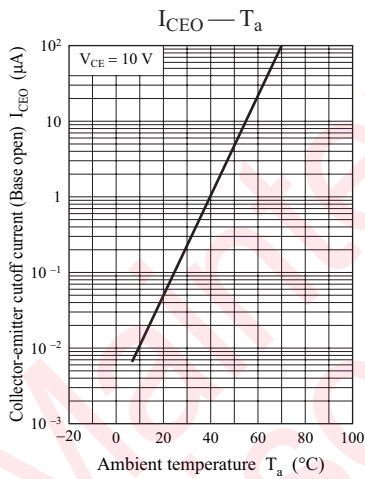
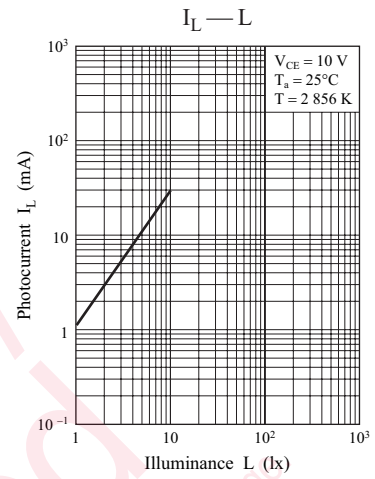
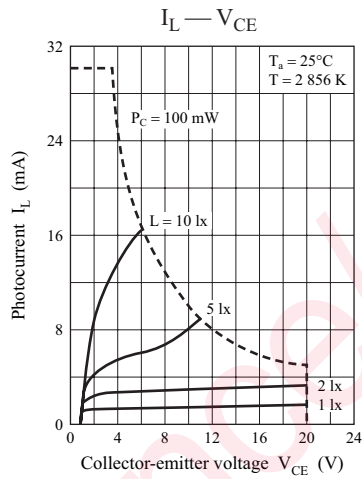
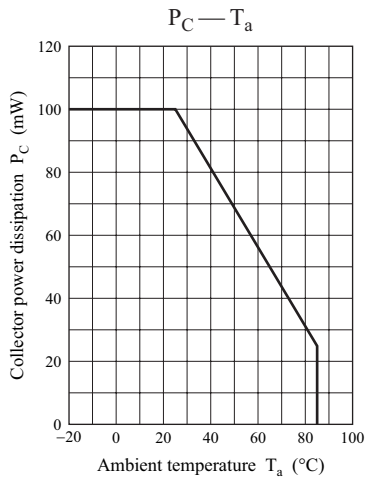
3. This device is designed by disregarding radiation.

4. *1:Source: Tungsten lamp (color temperature 2 856K)

*2: Switching time measurement circuit

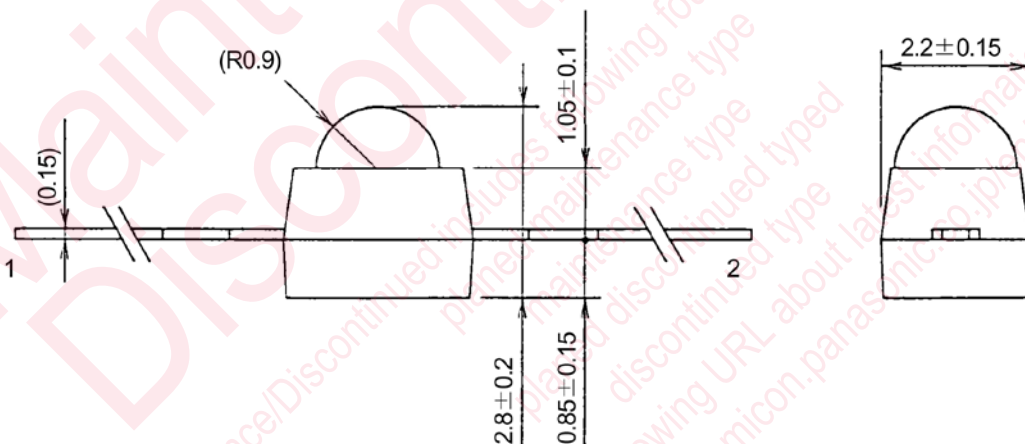
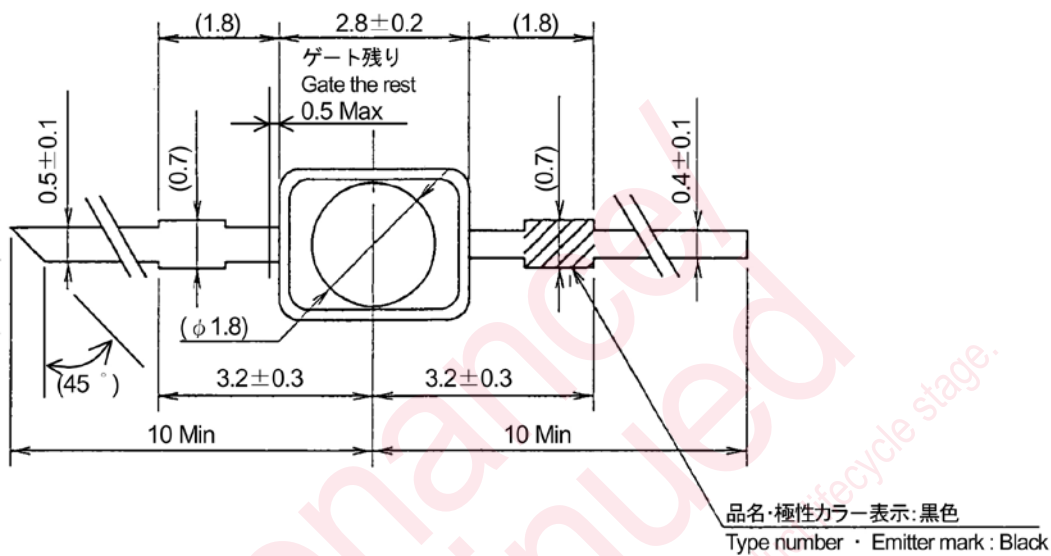


Note) The part number in the parenthesis shows conventional part number.



■ Package (Unit: mm)

LPDLTN2S0001



(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: Collector
- 2: Emitter

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