

# PNZ330CL (PN330CL)

Silicon planar type

For optical control systems

## ■ Features

- TO-18 standard type package
- High coupling capability suitable for plastic fiber
- High quantum efficiency
- High-speed response

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

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

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Photocurrent * <sup>1</sup>	$I_L$	$V_R = 10 \text{ V}, L = 1000 \text{ lx}$	7	10		μA
Drain current	$I_D$	$V_R = 10 \text{ V}$		0.1	10	nA
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		7		pF
Peak sensitivity wavelength	$\lambda_{PD}$	$V_R = 10 \text{ V}$		850		nm
Half-power angle	$\theta$	The angle when the photocurrent is halved		70		°
Rise time * <sup>2</sup>	$t_r$	$V_R = 10 \text{ V}, R_L = 50 \text{ k}\Omega$		2		ns
Fall time * <sup>2</sup>	$t_f$	$V_R = 10 \text{ V}, R_L = 50 \text{ k}\Omega$		2		ns

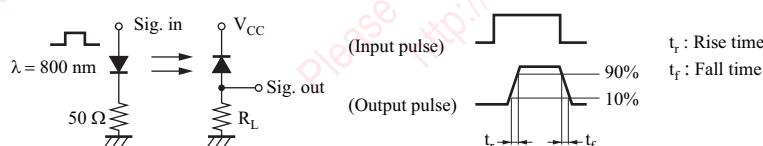
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

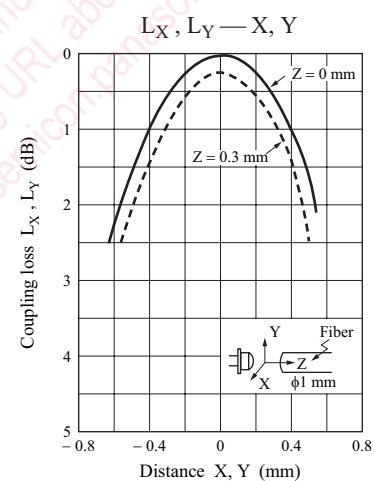
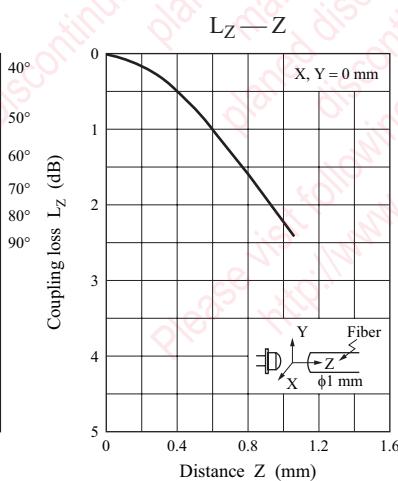
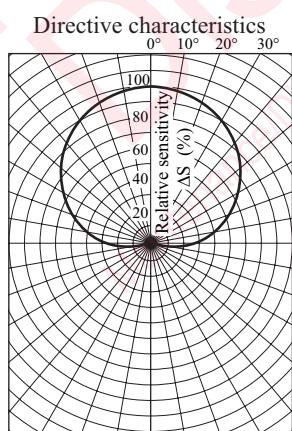
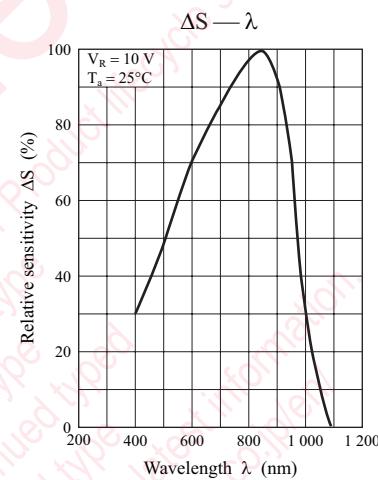
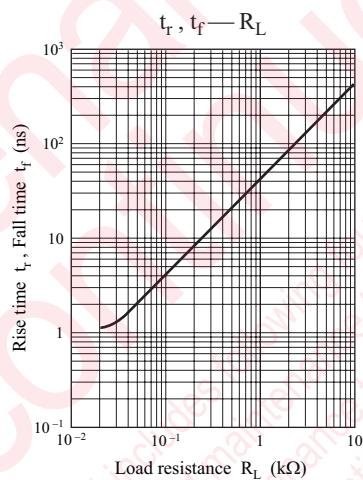
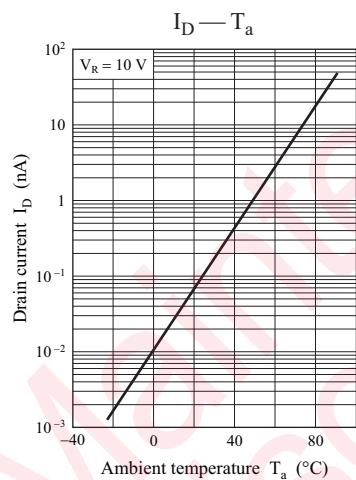
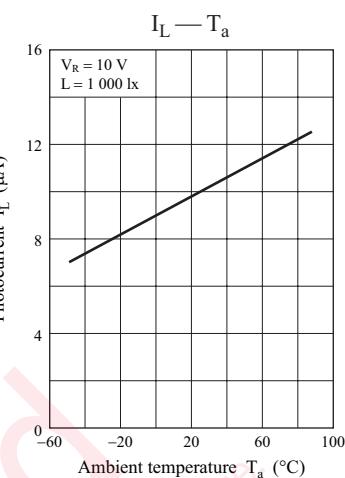
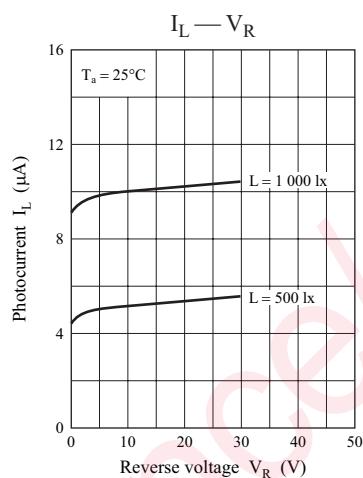
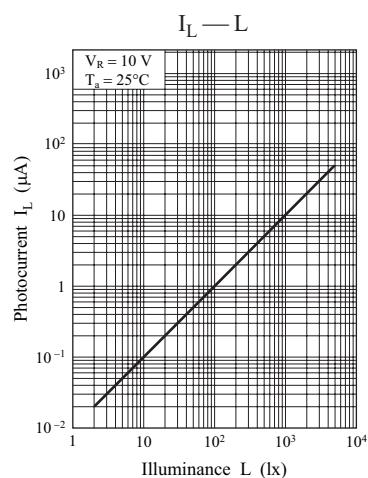
3. This device is designed by disregarding radiation.

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

\*2: Switching time measurement circuit

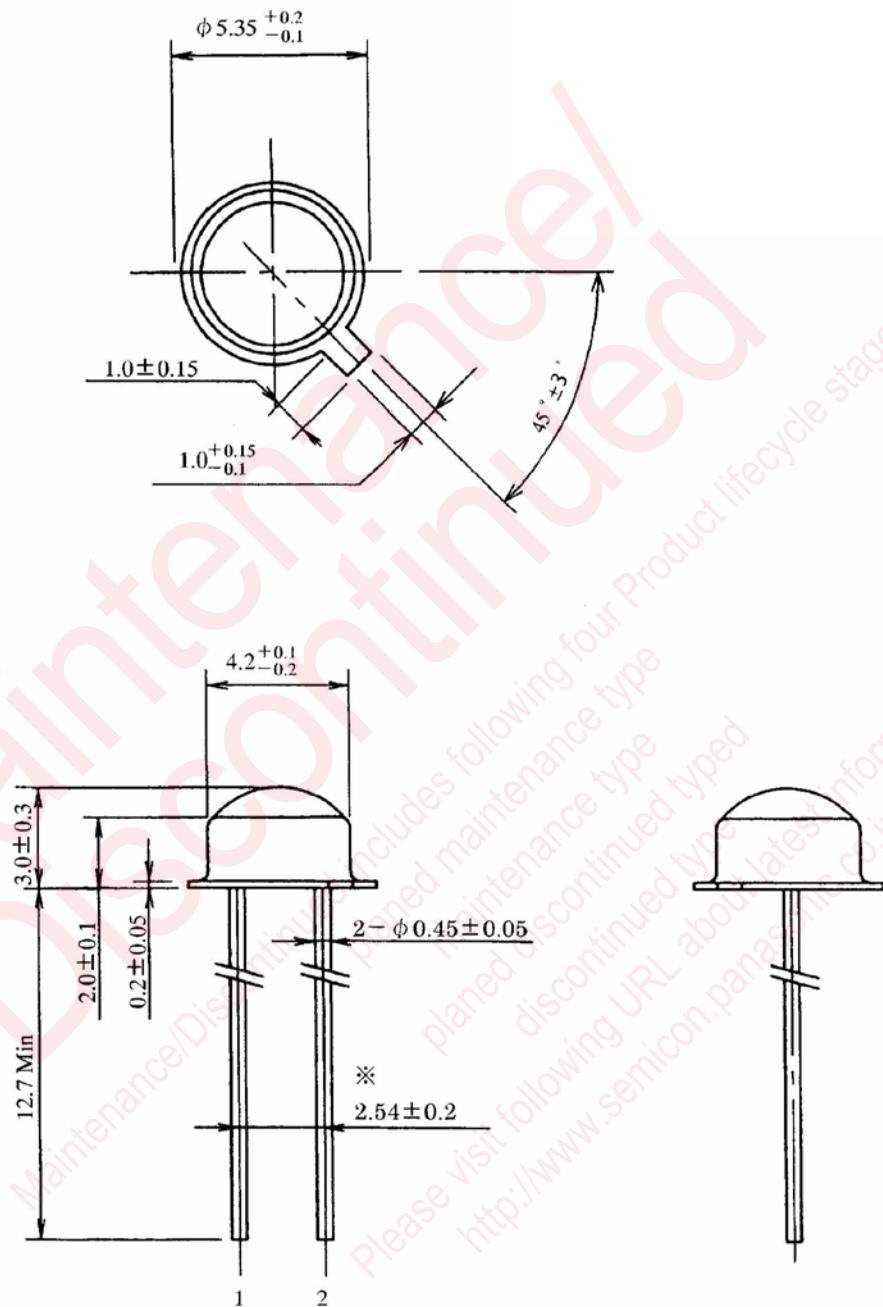


Note) The part number in the parenthesis shows conventional part number.



■ Package (Unit: mm)

MPDLTN2S0001



(注 1)(Note1)※リード根元寸法とする。／※Indicates root dimensions of lead.

• Pin name

1: Anode

2: Cathode

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