

# PNZ334 (PN334)

## Silicon planar type

For optical control systems

### ■ Features

- Plastic type package ( $\phi 5$ )
- 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	$^\circ\text{C}$
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	$I_L$	$V_R = 10\text{ V}$ , $L = 1\,000\text{ lx}$	5.0	7.0		$\mu\text{A}$
Drain current	$I_D$	$V_R = 10\text{ V}$		0.1	10	nA
Terminal capacitance	$C_t$	$V_R = 0\text{ V}$ , $f = 1\text{ MHz}$		6		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		$^\circ$
Rise time *2	$t_r$	$V_R = 10\text{ V}$ , $R_L = 50\ \Omega$		2		ns
Fall time *2	$t_f$			2		ns

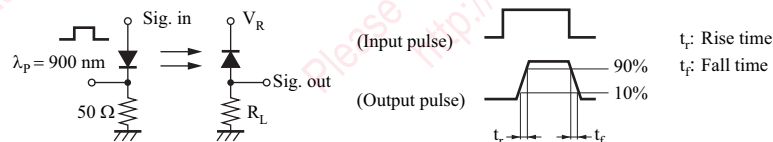
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

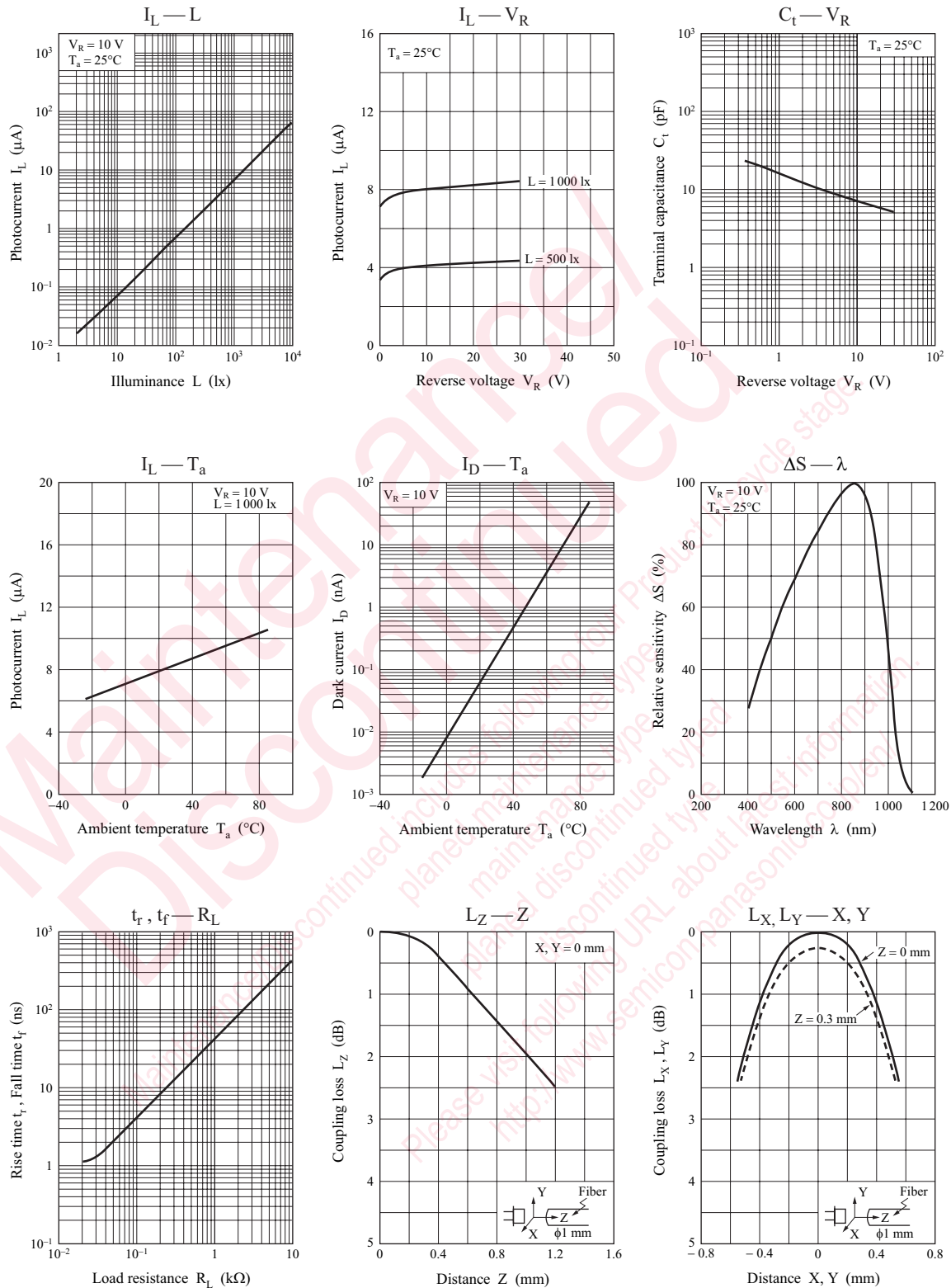
3. This device is designed by disregarding radiation.

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

\*2: Switching time measurement circuit

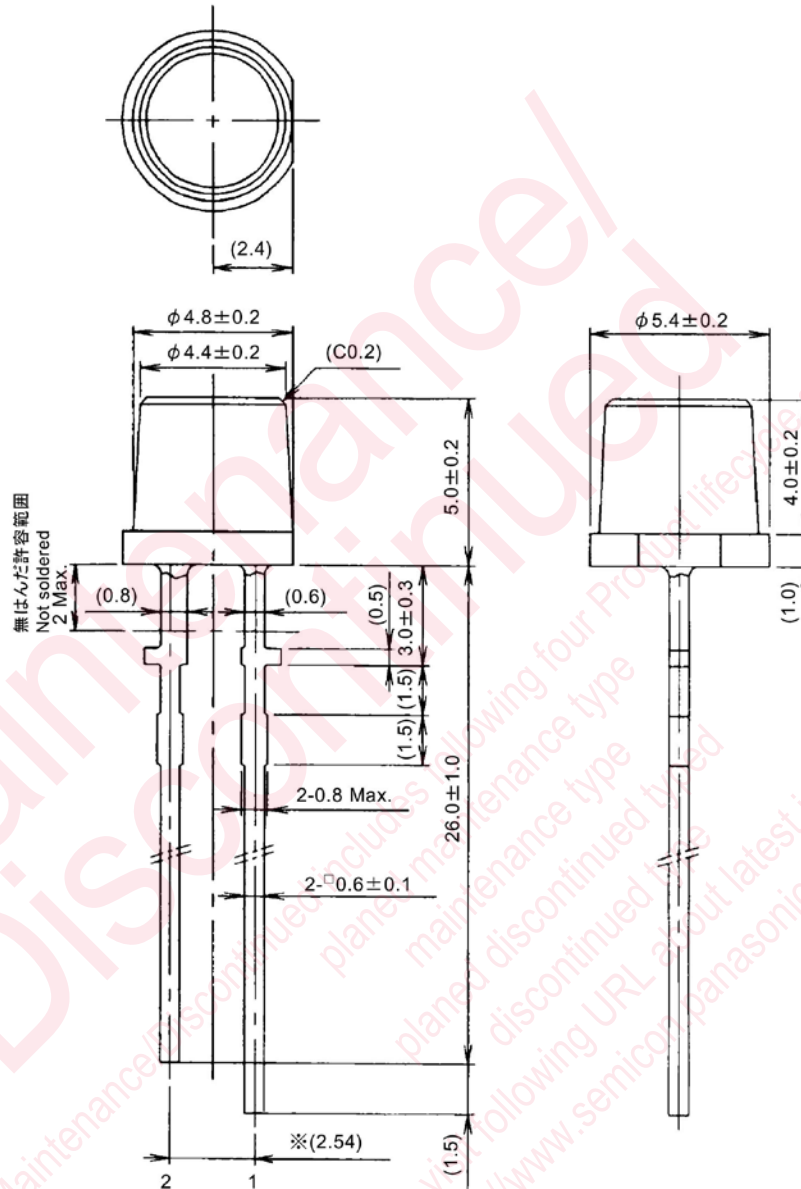


Note) The part number in the parenthesis shows conventional part number.



■ Package (Unit: mm)

LPTFTN2S0001



- Pin name
- 1: Anode
- 2: Cathode

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