#### **PIN Photodiodes**

## **Panasonic**

# PNZ334 (PN334)

### Silicon planar type

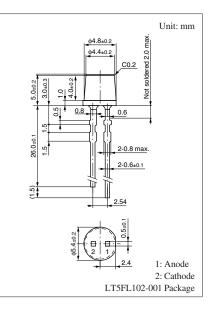
For optical control systems

#### Features

- Plastic type package (\$\$)
- High coupling capabillity suitable for plastic fiber
- High quantum efficiency
- High-speed response

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

Parameter	Symbol	Rating	Unit	
Reverse voltage	V <sub>R</sub>	30	V	
Power dissipation	P <sub>D</sub>	100	mW	
Operating ambient temperature	T <sub>opr</sub>	-25 to +85	°C	
Storage temperature	T <sub>stg</sub>	-30 to +100	°C	



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

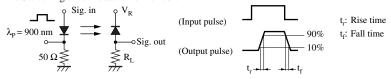
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Dark current	ID	$V_R = 10 V$		0.1	10.0	nA
Photocurrent *1	IL	$V_R = 10 V, L = 1000 lx$	5	7		μΑ
Peak emission wavelength	λ <sub>p</sub>	V <sub>R</sub> = 10 V		850		nm
Rise time *2	t <sub>r</sub>	$V_{\rm R} = 10 \text{ V}, \text{ R}_{\rm L} = 50 \Omega$		2		ns
Fall time *2	t <sub>f</sub>			2		ns
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		6		pF
Half-power angle	θ	The angle from which photocurrent		70		0
		becomes 50%				

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%.

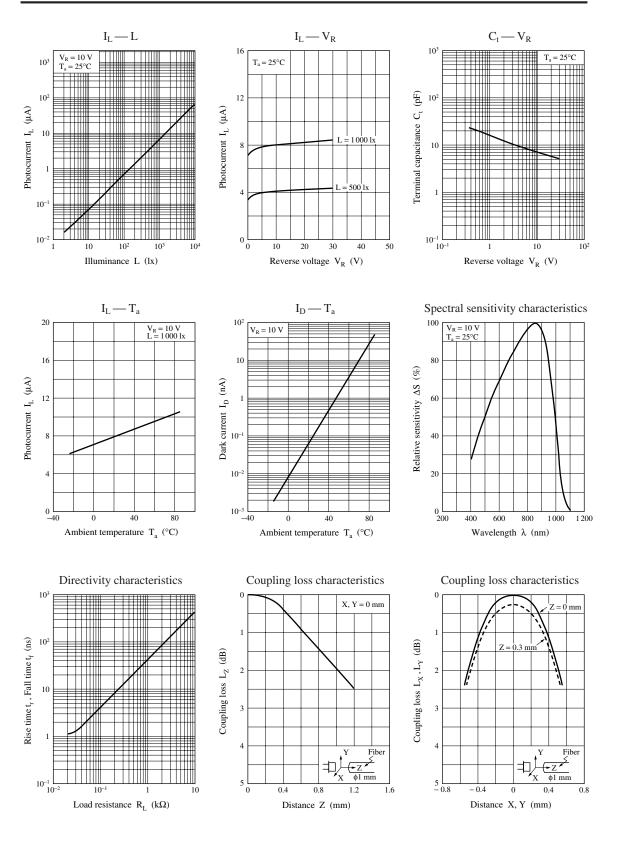
- 3. This device is designed be disregarded radiation.
- 4. \*1: Source: Tungsten (color temperature 2856 K)

\*2: Switching time measurement circuit



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

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