Panasonic

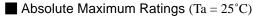
PNZ334 (PN334)

PIN Photodiode

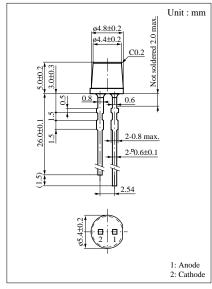
For optical fiber communication systems

Features

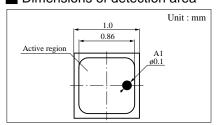
- Plastic type package (ø 5)
- High coupling capability suitable for plastic fiber
- High quantum efficiency
- High-speed response



Parameter	Symbol	Ratings	Unit	
Reverse voltage (DC)	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	



Dimensions of detection area

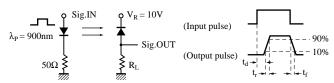


Electro-Optical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Dark current	I_D	$V_R = 10V$		0.1	10	nA
Photo current	I_L	$V_R = 10V, L = 1000 lx^{*1}$	5	7		μΑ
Peak sensitivity wavelength	$\lambda_{ m P}$	$V_R = 10V$		850		nm
Response time	t_r, t_f^{*2}	$V_R = 10V, R_L = 50\Omega$		2		ns
Capacitance between pins	C _t	$V_R = 0V$, $f = 1MHz$		6		pF
Acceptance half angle	θ	Measured from the optical axis to the half power point		70		deg.

 $^{^{*1}}$ Measurements were made using a tungsten lamp (color temperature T = 2856K) as a light source.

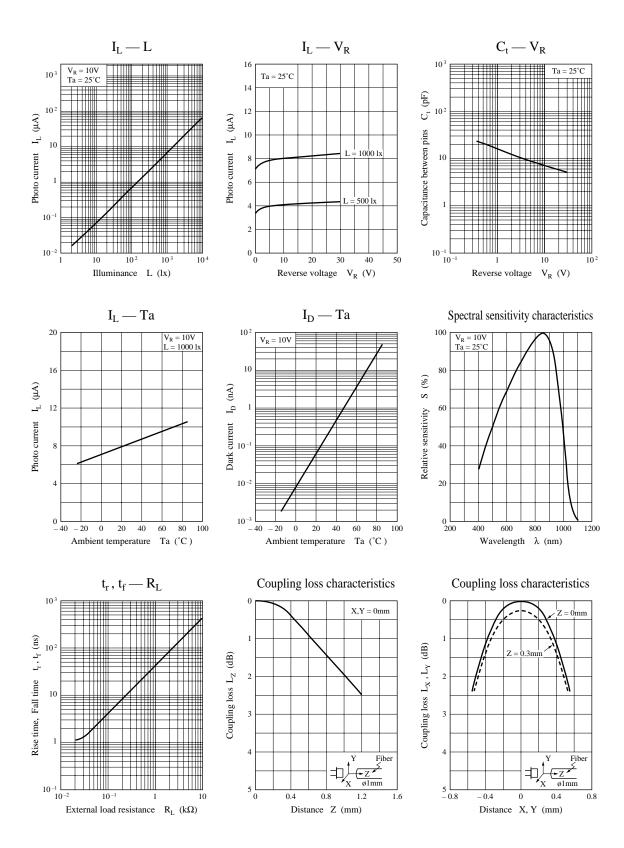
^{*2} Switching time measurement circuit



- t_d: Delay time
- $t_{\rm r}$: Rise time (Time required for the collector photo current to increase from 10% to 90% of its final value)
- $\rm t_f\colon Fall\ time\ (Time\ required\ for\ the\ collector\ photo\ current\ to$ decrease from 90% to 10% of its initial value)

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

PNZ334 PIN Photodiodes



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