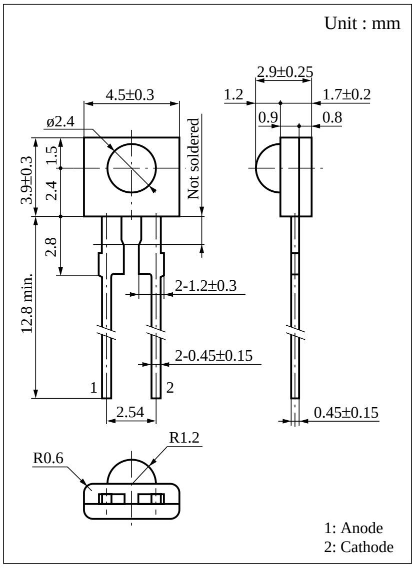
PNA3602L

PIN Photodiode

For optical control systems



Features

- High quantum efficiency
- High-speed response
- Small size, thin side-view type package

Absolute Maximum Ratings (Ta = 25˚C)

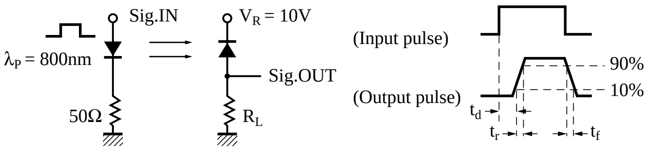
Parameter	Symbol	Ratings	Unit
Reverse voltage (DC)	V_R	30	V
Power dissipation	P_D	100	mW
Operating ambient temperature	T_{opr}	–25 to +85	˚C
Storage temperature	T_{stg}	–30 to +100	˚C

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]	16			µA
Peak sensitivity wavelength	λ_P	V_R = 10V		850		nm
Response time	t_r, t_f[*2]	V_R = 10V, R_L = 50Ω		2		ns
Capacitance between pins	C_t	V_R = 10V, f = 1MHz		6		pF
Acceptance half angle	θ	Measured from the optical axis to the half power point		45		deg.

[*1] Measurements were made using a tungsten lamp (color temperature T = 2856K) as a light source.

[*2] Switching time measurement circuit

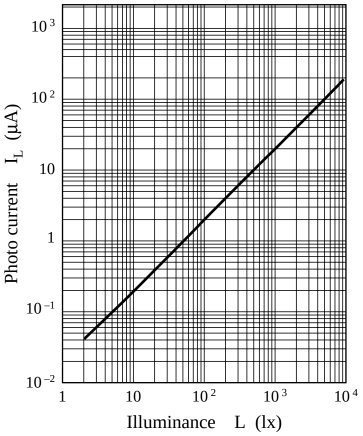


t_d : Delay time

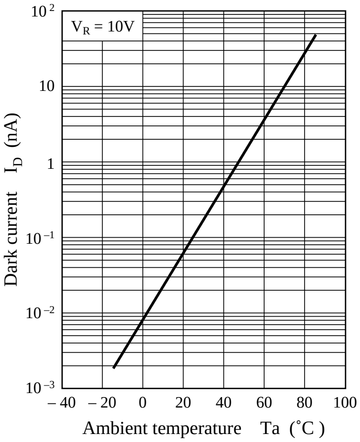
t_r : Rise time (Time required for the collector photo current to increase from 10% to 90% of its final value)

t_f : Fall time (Time required for the collector photo current to decrease from 90% to 10% of its initial value)

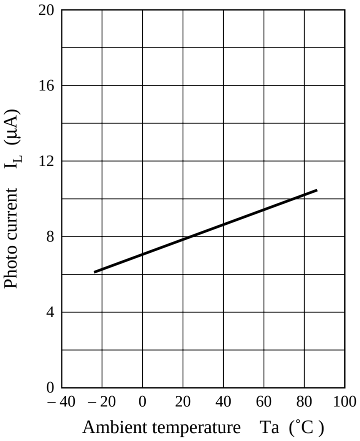
I_L — L



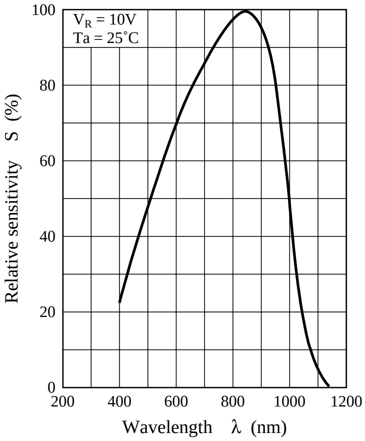
I_D — Ta



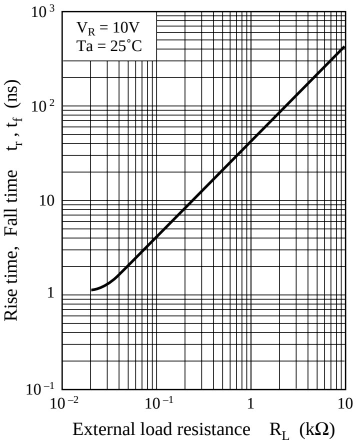
I_L — Ta



Spectral sensitivity characteristics



t_r , t_f — R_L



Directivity characteristics