

PNZ330CL (PN330CL)

Silicon planar type

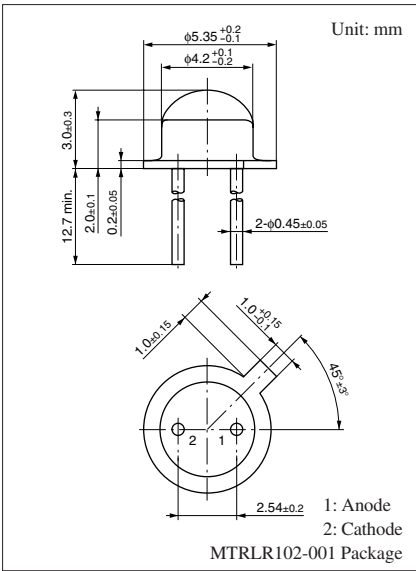
For optical control systems

■ 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	$^\circ\text{C}$
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
Dark current	I_D	$V_R = 10\text{ V}$		0.1	10.0	nA
Photocurrent *1	I_L	$V_R = 10\text{ V}$, $L = 1\ 000\text{ lx}$	7	10		μA
Peak emission wavelength	λ_p	$V_R = 10\text{ V}$		850		nm
Rise time *2	t_r	$V_R = 10\text{ V}$, $R_L = 50\ \Omega$		2		ns
Fall time *2	t_f			2		ns
Terminal capacitance	C_t	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$		7		pF
Half-power angle	θ	The angle from which photocurrent becomes 50%		70		$^\circ$

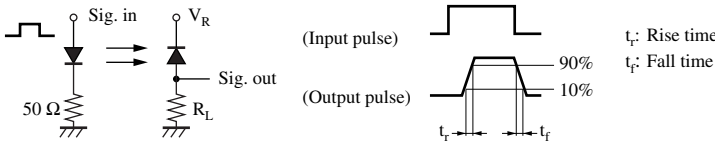
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

3. This device is designed be disregarded radiation.

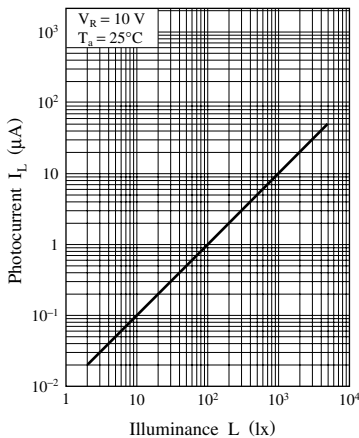
4. *1: Source: Tungsten (color temperature 2856 K)

*2: Switching time measurement circuit

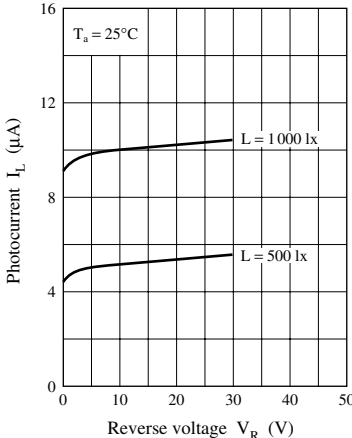


Note) The part number in the parenthesis shows conventional part number.

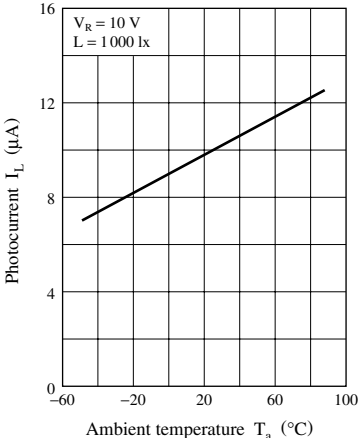
$I_L - L$



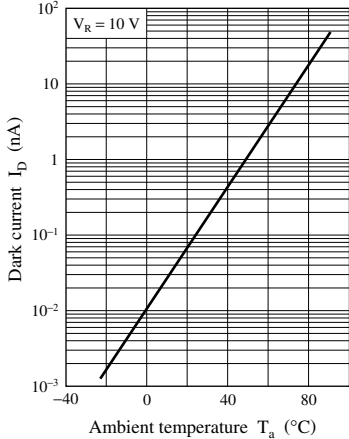
$I_L - V_R$



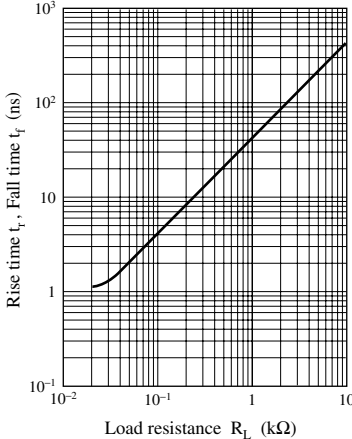
$I_L - T_a$



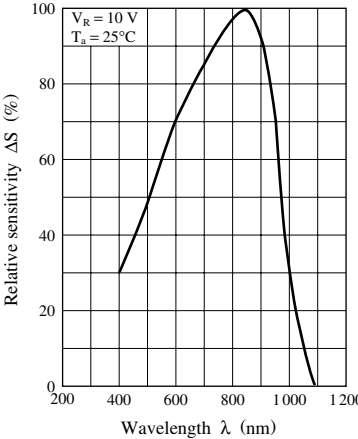
$I_D - T_a$



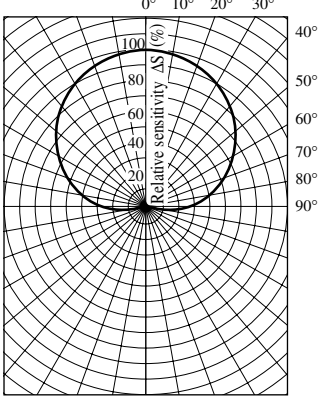
$t_r, t_f - R_L$



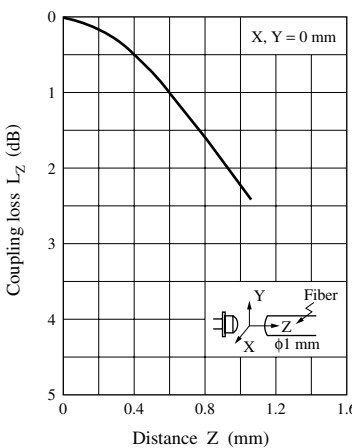
Spectral sensitivity characteristics



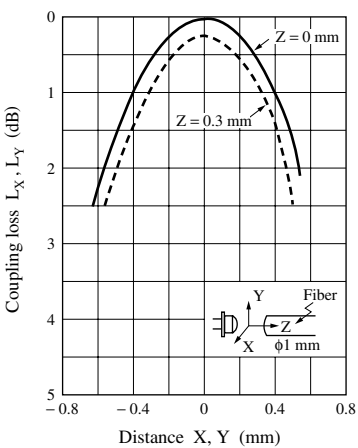
Directivity characteristics



Coupling loss characteristics



Coupling loss characteristics



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