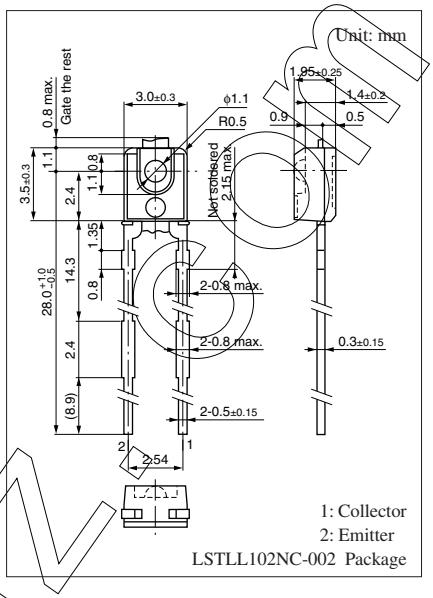
PNZ263L (PN263L-(NC))

Silicon planar type

For optical control systems



■ Features

- Darlington output, high sensitivity
- Small size, thin side-view type package
- Adoption of visible light cutoff resin

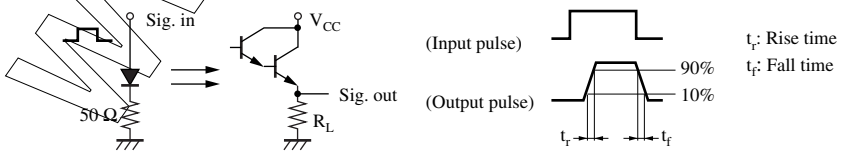
■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector-emitter voltage (Base open)	V_{CEO}	20	V
Emitter-collector voltage (Base open)	V_{ECO}	5	V
Collector current	I_C	30	mA
Collector power dissipation	P_C	100	mW
Operating ambient temperature	T_{opr}	−25 to +80	°C
Storage temperature	T_{stg}	−30 to +100	°C

■ Electrical-Optical Characteristics $T_a = 25°C \pm 3°C$

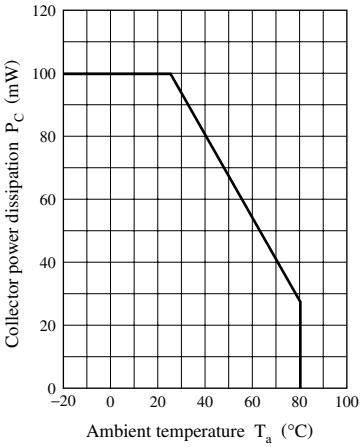
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Sensitivity to infrared radiation *1	S_{IR}	V_{CE} = 10 V, H = 3.75 μW/cm²	100	250	500	μA
Dark current	I_{CEO}	V_{CE} = 10 V		0.01	0.50	μA
Peak emission wavelength	λ_p	V_{CE} = 10 V		850		nm
Half-power angle	θ	The angle from which photocurrent becomes 50%		25		°
Rise time *2	t_r	V_{CC} = 10 V, I_C = 1 mA, R_L = 100 Ω		150		μs
Fall time *2	t_f			150		μs
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	I_C = 100 μA, H = 3.75 μW/cm²		0.7	1.5	V

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. Spectral sensitivity characteristics: Sensitivity for wave length over 400 nm maximum sensitivity ratio is 100%.
3. This device is designed be disregarded radiation.
5. *1: Source: Infrared radiation (λ = 940 nm)
*2:Switching time measurement circuit

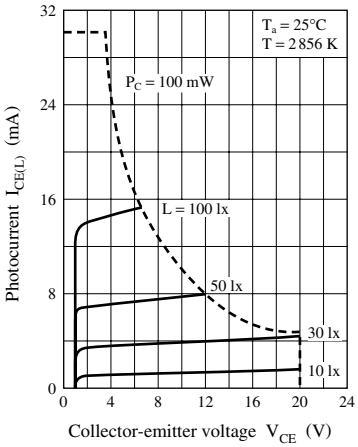


Note) The part number in the parenthesis shows conventional part number.

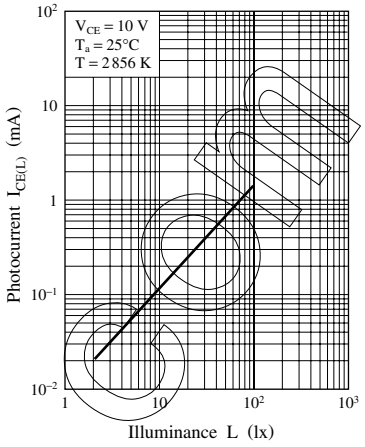
P_C — T_a



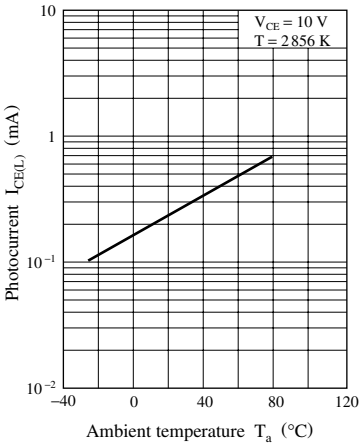
$I_{CE(L)}$ — V_{CE}



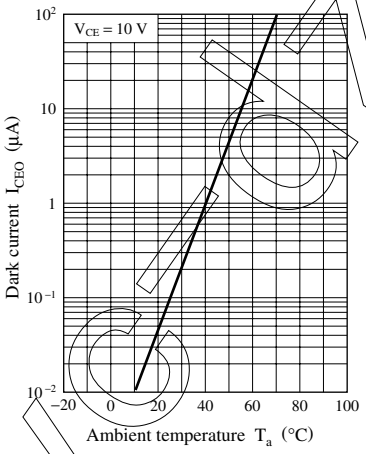
$I_{CE(L)}$ — L



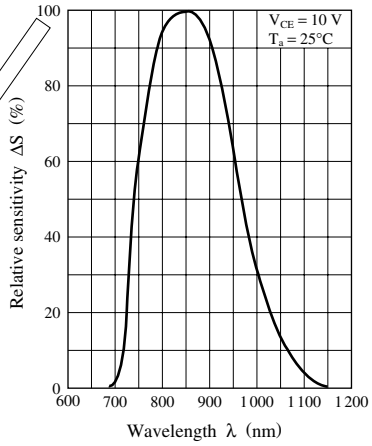
$I_{CE(L)}$ — T_a



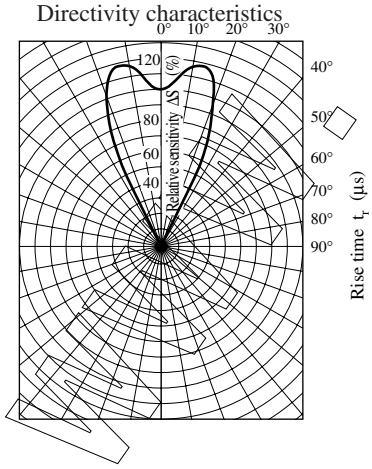
I_{CEO} — T_a



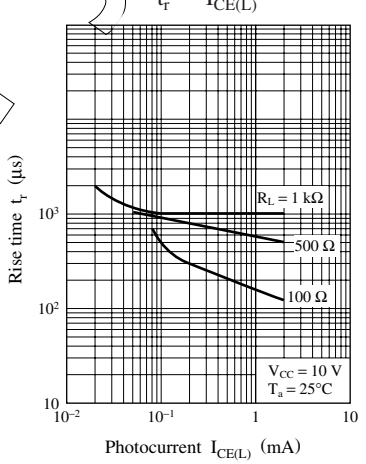
Spectral sensitivity characteristics



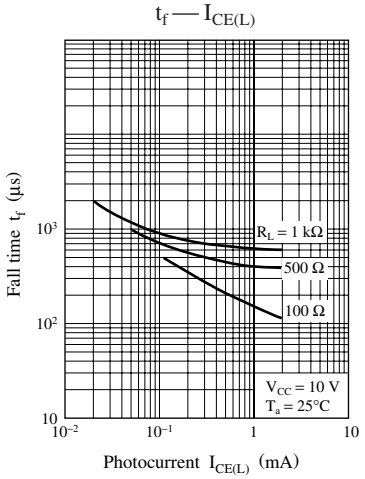
Directivity characteristics



t_r — $I_{CE(L)}$



t_f — $I_{CE(L)}$



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