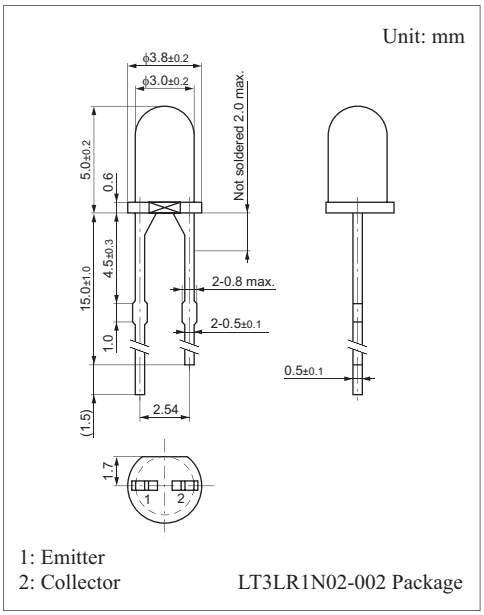
PNA1803L

Silicon planar type

For optical control systems



■ Features

- Fast response
- Wide spectral sensitivity characteristics
- ϕ3 plastic package

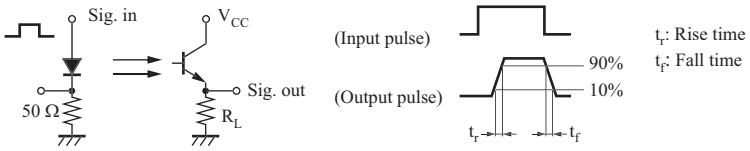
■ Absolute Maximum Ratings $T_a = 25°C$

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	20	mA
Collector power dissipation	P_C	50	mW
Operating ambient temperature	T_{opr}	–25 to +85	°C
Storage temperature	T_{stg}	–30 to +100	°C

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Photocurrent *1	$I_{CE(L)}$	V_{CE} = 10 V, L = 1 000 lx	1.0		3.0	mA
Dark current	I_{CEO}	V_{CE} = 10 V		1	500	nA
Peak sensitivity wavelength	λ_P	V_{CE} = 10 V		800		nm
Half-power angle	θ	The angle from which photocurrent becomes 50%		30		°
Rise time *2	t_r	V_{CC} = 10 V, $I_{CE(L)}$ = 1 mA, R_L = 100 Ω		2.5		μs
Fall time *2	t_f			3.5		μs

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 by disregarding radiation.
4 *1: Source: Tungsten (color temperature 2 856 K)
*2: Switching time measurement circuit



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