

PT601T

Chip Type Phototransistor

■ Features

1. Subminiature (Dimensions: 1.6 x 1.6 x 0.8mm)
2. Thin type (Thickness: 0.8mm)
3. High sensitivity (Darlington output)
4. Surface mount type (leadless type)
5. Taped model (4 000pcs./reel)

■ Applications

1. For ON/OFF control of LEDs for LCD backlight
2. Pagers
3. Cellular phones
4. Other portable equipment

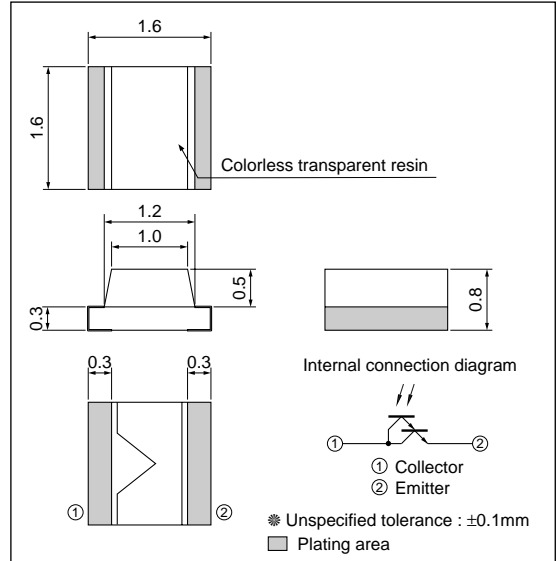
■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	V _{CEO}	35	V
Emitter-collector voltage	V _{ECO}	6	V
Collector current	I _C	20	mA
Collector power dissipation	P _C	50	mW
Operating temperature	T _{opr}	-25 to +85	°C
Storage temperature	T _{stg}	-25 to +100	°C
*1 Soldering temperature	T _{sol}	260	°C

*1 Hand soldering temperature, for MAX. 3s

■ Outline Dimensions

(Unit : mm)



■ Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions *2	MIN.	TYP.	MAX.	Unit
Collector current	I_C	$E_e=0.01\text{mW/cm}^2$, $V_{CE}=10\text{V}$	0.03	–	0.3	mA
Collector dark current	I_{CEO}	$E_e=0$, $V_{CE}=10\text{V}$	–	–	1.0	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$E_e=1\text{mW/cm}^2$, $I_C=2.5\text{mA}$	–	–	1.0	V
Peak sensitivity wavelength	λ_p	–	–	880	–	nm
Response time	Rise time	$V_{CE}=2\text{V}$, $I_C=10\text{mA}$ $R_L=100\Omega$	–	100	–	μs
	Fall time		–	100	–	μs
Half intensity angle	$\Delta\theta$	–	–	± 60	–	°

*2 E_e : Illuminance, irradiance by CIE standard light source A (tungsten lamp)

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