

# PT600T

## Ultra-compact Chip Part Type Phototransistor

### ■ Features

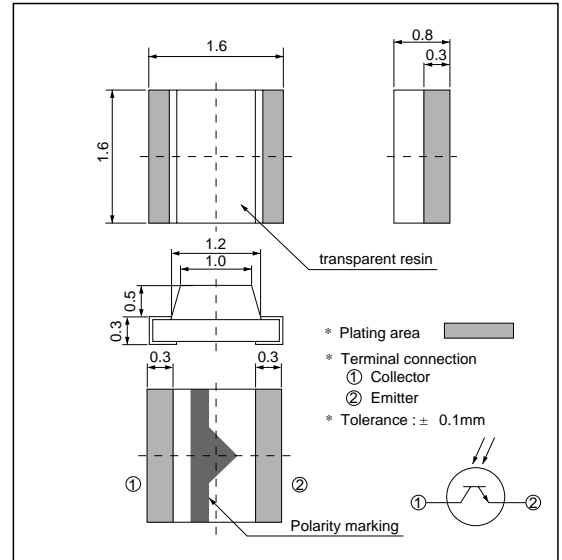
1. Ultra-compact type (1.6 x 1.6 x 0.8 mm)
2. Thin type (thickness : 0.8 mm)
3. Surface mounting type (leadless)
4. Taped model (4000 pcs/reel)

### ■ Applications

1. For liquid crystal backlight LED ON-OFF control
2. Pagers
3. Cellular phones
4. Other portable equipment

### ■ Outline Dimensions

(Unit : mm)



### ■ 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. 3 seconds

### ■ Electro-optical Characteristics

(Ta = 25°C)

Parameter		Symbol	Conditions *2	MIN.	TYP.	MAX.	Unit
Collector current		$I_C$	$E_e = 5\text{mW/cm}^2, V_{CE} = 5\text{V}$	0.7	3.5	9.6	mA
Dark current		$I_{CEO}$	$E_e = 0, V_{CE} = 20\text{V}$	-	-	0.1	$\mu\text{A}$
Collector-emitter saturation voltage		$V_{CE(sat)}$	$E_e = 10\text{mW/cm}^2, I_C = 0.5\text{mA}$	-	0.2	0.4	V
Peak sensitivity wavelength		$\lambda_p$	-	-	880	-	nm
Response time	Rise	$t_r$	$V_{CE} = 20\text{V}, I_C = 1\text{mA}$ $R_L = 1\text{k}\Omega$	-	10	-	$\mu\text{s}$
	Fall	$t_f$		-	-	-	-
Half intensity angle		$\Delta\theta$	-	-	± 60	-	°

\*2  $E_e$  : Irradiance by CIE standard light source A (tungsten lamp)