

PT600T

Ultra-compact Chip Part Type Phototransistor

■ Features

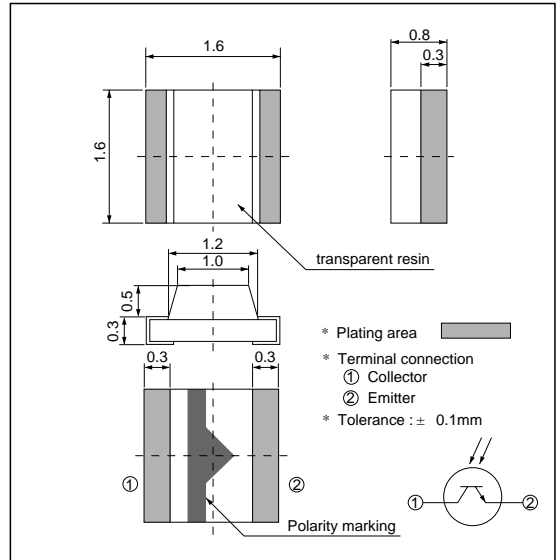
1. Ultra-compact type (1.6 x 1.6 x 0.8 mm)
2. Thin type (thickness : 0.8 mm)
3. Surface mounting type (leadless)
4. Taped model (4000 pcs/reel)

■ 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	μA
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		λ_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	-	μs
	Fall	t_f		-	-	-	-
Half intensity angle		$\Delta\theta$	-	-	± 60	-	°

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

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