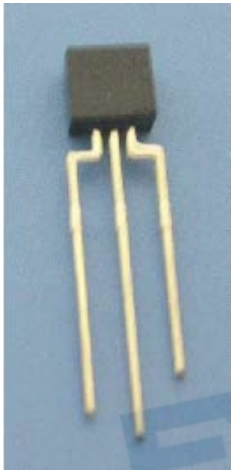


Side Face Silicon Phototransistor PT5529B/L2/H2



Features

- Fast response time
- High photo sensitivity
- Pb free
- This product itself will remain within RoHS compliant version.

Description

PT5529B/L2/H2 is a high speed and high sensitive dual phototransistor molded in a black plastic package with plat side view

The device is spectrally matched with IR emitters.

Applications

- Mouse
- Optoelectronic Switch
- Photo Interrupter

Device Selection Guide

Chip Materials	Lens Color
Silicon	Black

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Collector-Voltage	V _{ECO}	5	V
Collector Current	I _C	20	mA
Operating Temperature	T _{opr}	-40 ~ +85°C	°C
Storage Temperature	T _{stg}	-40 ~ +85°C	°C
Lead Soldering Temperature(*1)	T _{sol}	260	°C
Power Dissipation at (or below) 25°C Free Air Temperature	P _D	75	mW

Notes: *1:Soldering time ≤ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

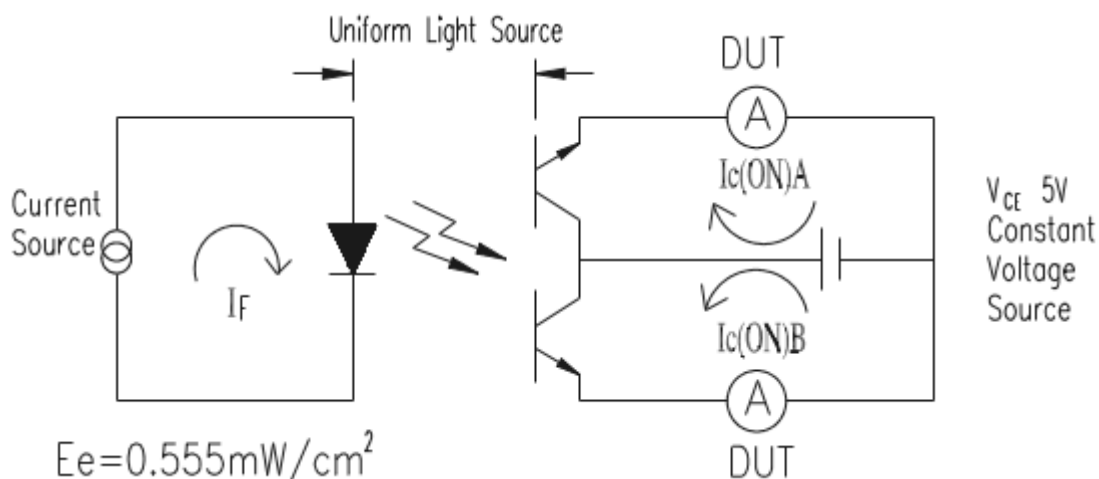
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Collector – Emitter Breakdown Voltage	BV_{CEO}	30	-----	-----	V	$I_C=100\mu A$ $E_e=0mW/cm^2$
Emitter-Collector Breakdown Voltage	BV_{ECO}	5	-----	-----	V	$I_E=100\mu A$ $E_e=0mW/cm^2$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-----	-----	0.4	V	$I_C=2mA$ $E_e=1mW/cm^2$
Rise Time	t_r	-----	15	-----	μS	$V_{CE}=5V$ $I_C=1mA$ $RL=1000\Omega$
Fall Time	t_f	-----	15	-----		
Collector Dark Current	I_{CEO}	-----	-----	100	nA	$E_e=0mW/cm^2$ $V_{CE}=20V$
On State Collector Current	$I_{C(on)}$	200	-----	1600	μA	$E_e=0.555mW/cm^2$ $V_{CE}=5V$
Rang Of Spectral Bandwidth	λ_P	-----	940	-----	nm	----
Wavelength of Peak Sensitivity	$\lambda_{0.5}$	760	-----	1100	nm	----

Test Method For On State Collector Current :

Condition : $E_e=0.555\text{mW/cm}^2$, $V_{CE}=5\text{V}$

Test Item : Collector Current [$I_{C(ON)}$]

Unit : μA



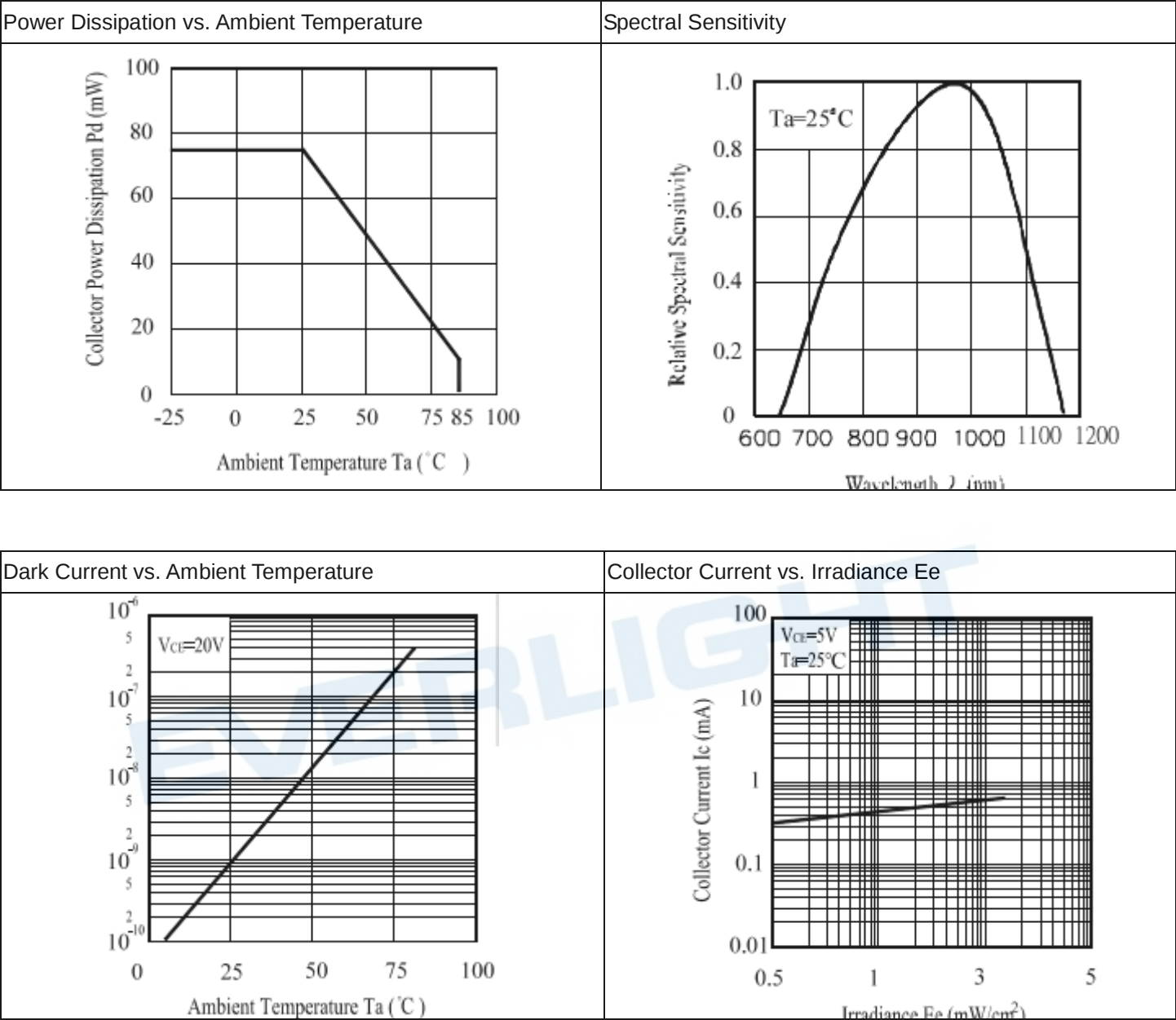
To Distinguish Intensity:

Condition: $V_{CE}=5\text{V}$ $E_e:0.555\text{mW/cm}^2$

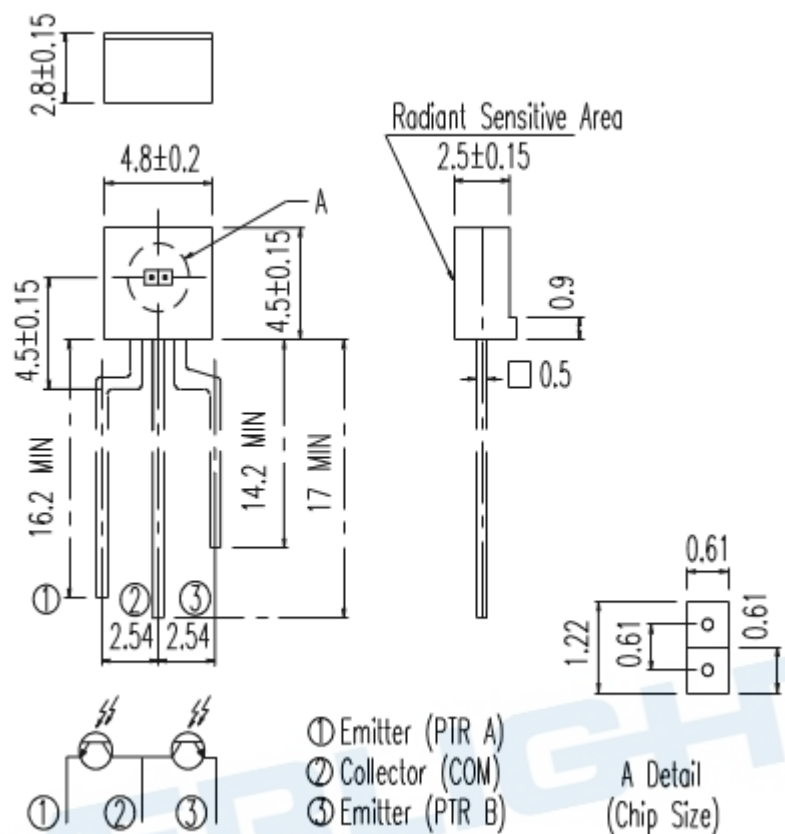
A Ranks

Ranks	Symbol	Min	Typ	Max	Unit	Test Condition
A1	$I_{C(ON)}$	129	---	226	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A2	$I_{C(ON)}$	195	---	306	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A3	$I_{C(ON)}$	262	---	380	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A4	$I_{C(ON)}$	330	---	461	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A5	$I_{C(ON)}$	398	---	544	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A6	$I_{C(ON)}$	468	---	625	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A7	$I_{C(ON)}$	536	---	703	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A8	$I_{C(ON)}$	604	---	785	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A9	$I_{C(ON)}$	673	---	862	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A10	$I_{C(ON)}$	742	---	944	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A11	$I_{C(ON)}$	812	---	1018	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$
A12	$I_{C(ON)}$	882	---	1085	μA	$E_e=0.555\text{mW/c m}^2$ $V_{CE}=5\text{V}$

Typical Electro-Optical Characteristics Curves



Package Dimension

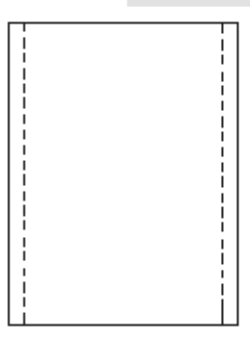


Note: Tolerances unless dimensions $\pm 0.25\text{mm}$

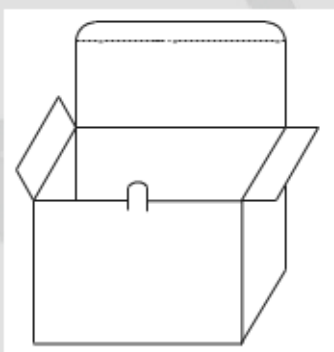
Packing Quantity Specification

Packing Specification

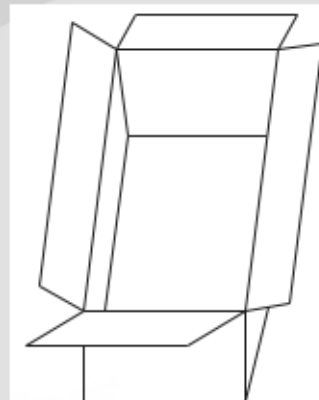
■ PE bag



■ Inner Carton

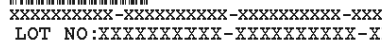


■ Outside Carton



1. 100PCS/1Bag,8Bag/1Box
2. 10Boxes/1Carton

Label Form Specification

RoHS		EVERLIGHT	5
CPN: XXXXXXXXXXXXXXXXXXXX			
			
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX			
P/N: XXXXXXXXXXXX			
			
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX			
LOT NO: XXXXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX			
			
QTY: XXXXXXXXXXXX HUE: XXXXXXXXXXXX			
			
CAT: XXXXXXXXXXXX REF: XXXXXXXXXXXX			
			
REFERENCE: XXXXXXXXXXXX			
			
MADE IN XXXXXX			
			

- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

Notes

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2. When using this product, please observe the absolute maximum ratings and the instruction for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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