



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

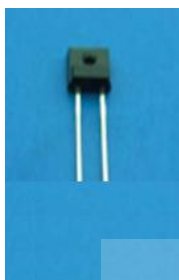
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Sidelooker Phototransistor

### PT928-6B-F



#### Features

- Fast response time
- High sensitivity
- Small junction capacitance
- Pb Free
- This product itself will remain within RoHS compliant version
- Compliance with EU REACH
- Compliance Halogen Free (Br < 900ppm, Cl < 900ppm, Br+Cl < 1500ppm)

#### Descriptions

- PT928-6B-F is a phototransistor in miniature package which is molded in a plastic with spherical top view lens
- The device is spectrally matched to infrared emitting diode

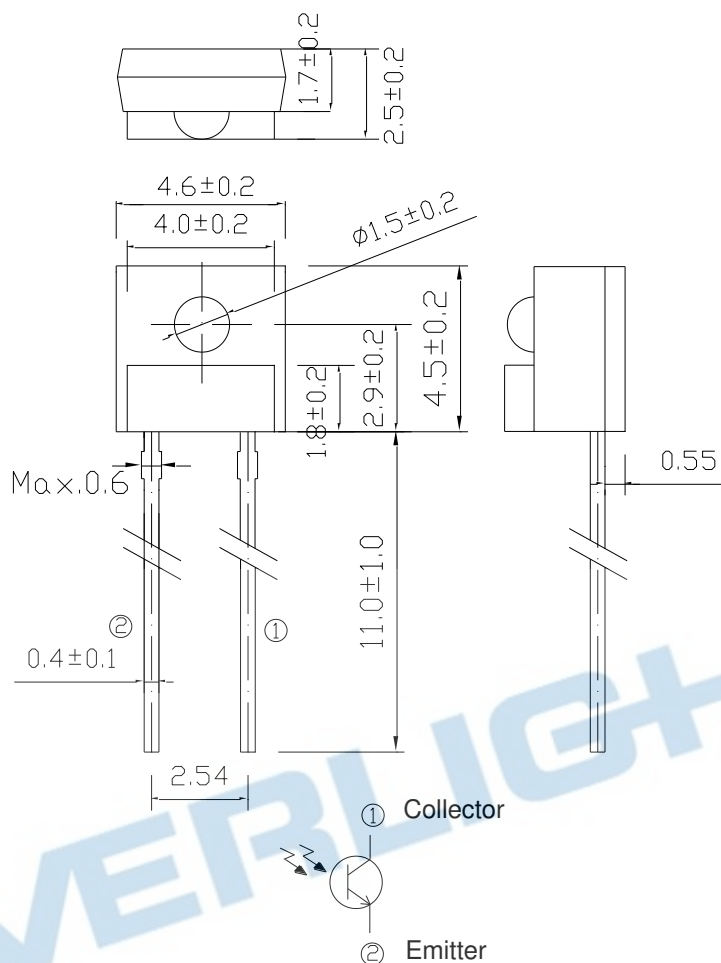
#### Applications

- Optoelectronic switch
- VCR, Video Camera
- Floppy disk drive
- Infrared applied system

#### Device Selection Guide

Part Category	Chip Material	Lens Color
PT	Silicon	Black

Package Dimension



Notes: 1. All dimensions are in millimeters  
2. Tolerances unless dimensions  $\pm 0.3\text{mm}$

Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Rating	Units
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Collector Voltage	$V_{ECO}$	5	V
Collector Current	$I_C$	20	mA
Operating Temperature	$T_{opr}$	-25 ~ +85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 ~ +85	$^\circ\text{C}$
Soldering Temperature *1	$T_{sol}$	260	$^\circ\text{C}$
Power Dissipation at (or below) 25 $^\circ\text{C}$ Free Air Temperature	$P_d$	75	mW

Notes: \*1. Soldering time  $\leq 5$  seconds.



### Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Rang of Spectral Bandwidth	$\lambda_{0.5}$	----	740	--	1100	nm
Wavelength of Peak Sensitivity	$\lambda_p$	----	--	940	--	nm
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=100\mu A$ $E_e=0mW/cm^2$	30	--	--	V
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	$I_E=100\mu A$ $E_e=0mW/cm^2$	5	--	--	V
Collector Dark Current	$I_{CEO}$	$V_{CE}=20V$ $E_e=0mW/cm^2$	--	--	100	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2mA$ $E_e=1mW/cm^2$	--	--	0.4	V
On State Collector Current	$I_{C(on)}$	$V_{CE}=5V$ $E_e=0.555mW/cm^2$	0.53	--	3.41	mA

### Rank

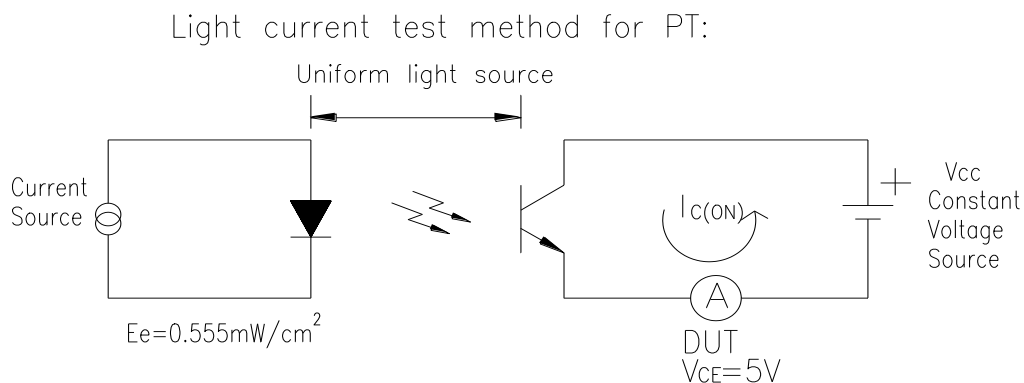
Condition:  $V_{CE}=5V$ ,  $E_e=0.555mW/cm^2$

Symbol	Condition	Ranks	Min.	Max.	Unit
$I_{C(ON)}$	$V_{CE}=5V$ $E_e=0.555mW/cm^2$	7-3	0.53	1.19	mA
		7-2	0.88	1.70	
		7-1	1.24	2.21	
		6-2	1.59	2.98	
		6-1	1.77	3.41	

**Notes:** This bin table is only for reference, not for specific bin shipment.

### Test Method For $I_{C(ON)}$ :

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



Typical Electro-Optical Characteristics Curves

Fig.1 Spectral Sensitivity

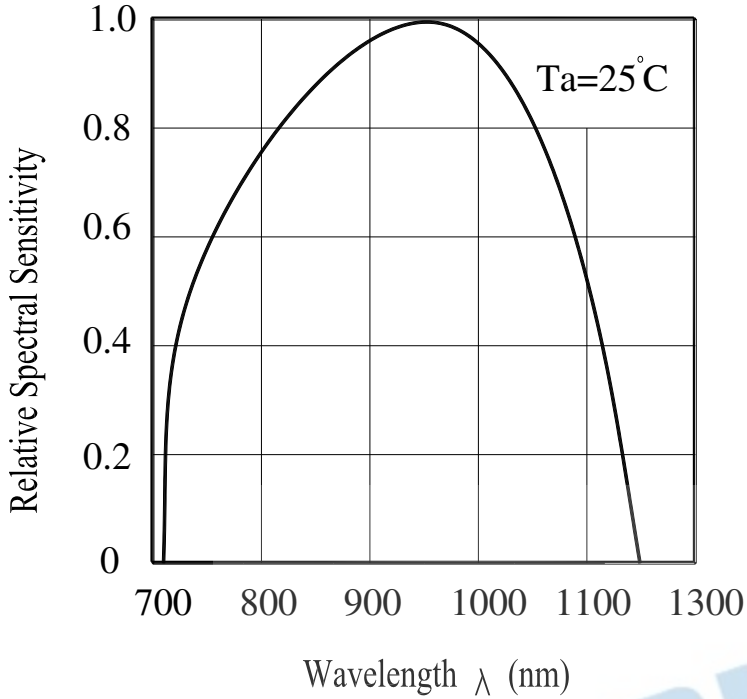


Fig.2 Collector Current Irradiance

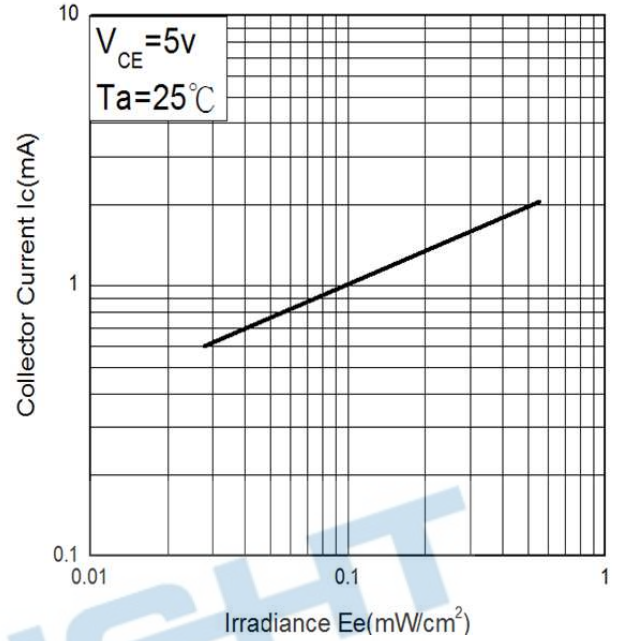
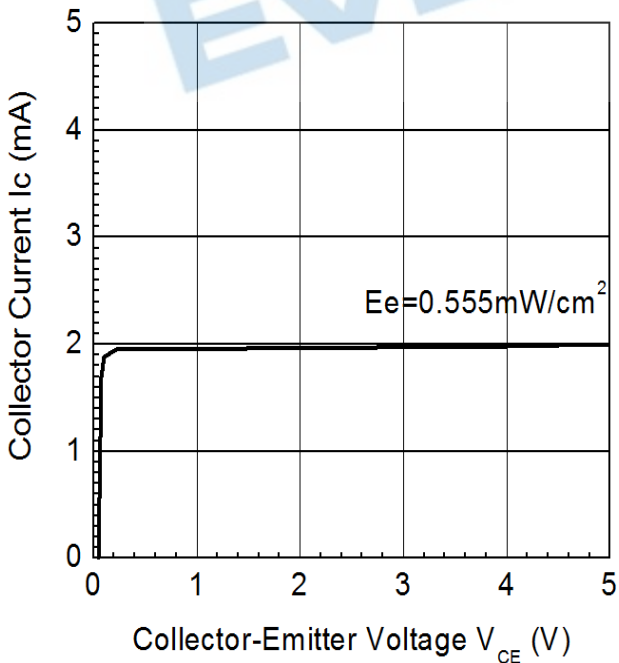


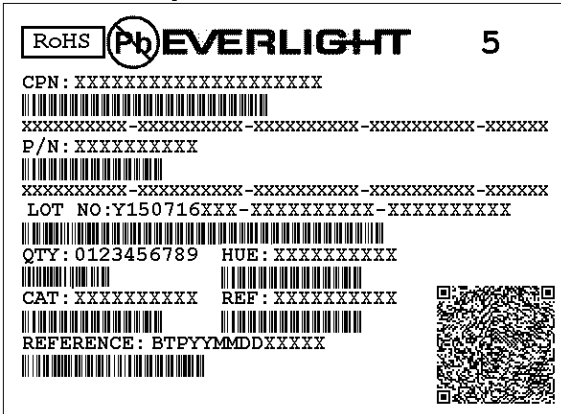
Fig.3 Collector Current vs. Collector-Emitter Voltage



### Packing Quantity Specification

1000 pcs/bag, 10 bags/box  
10 boxes/carton

### Label Form Specification



- CPN: Customer Part Number
- P/N: Part Number
- QTY: Packing Quantity
- CAT: Ranks
- REF: Reference
- LOT No: Lot Number

### Application Restrictions

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
3. When using this product, please observe the absolute maximum ratings and the instructions for use 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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