

END- LOOK PACKAGE PHOTOTRANSISTOR

● Features

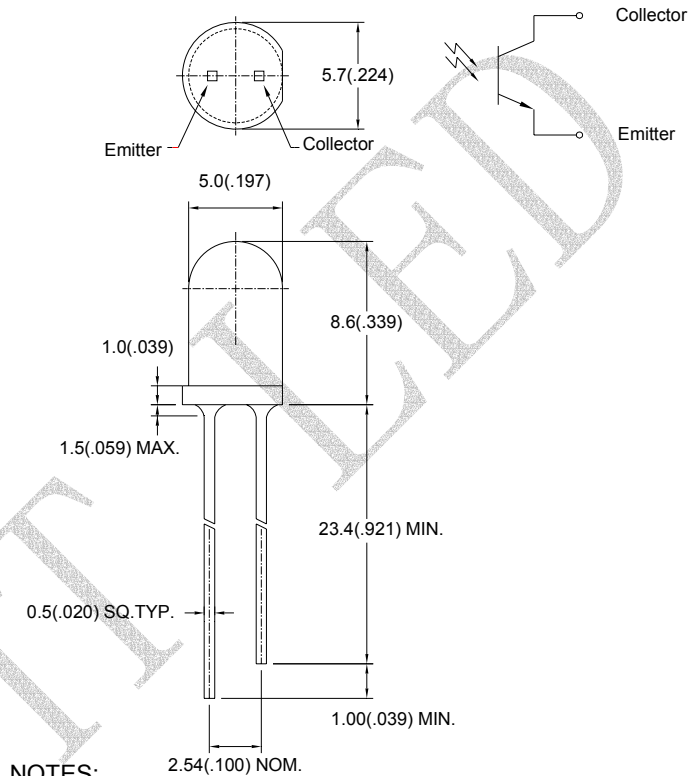
1. Wide range of collector current.
2. high sensitivity.
3. Low cost plastic package.
4. Lens Appearance: Black
5. This product doesn't contain restriction substance, comply RoHS standard

● Description

The BPT-BP1A34 is a NPN silicon phototransistor mounted in a lensed , special dark plastic package .

The lensing effect of the package allows an acceptance half view angle of 30° that is measured from the optical axis to the half power point .

● Package Dimensions:



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01') unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package
4. Specifications are subject to change without notice

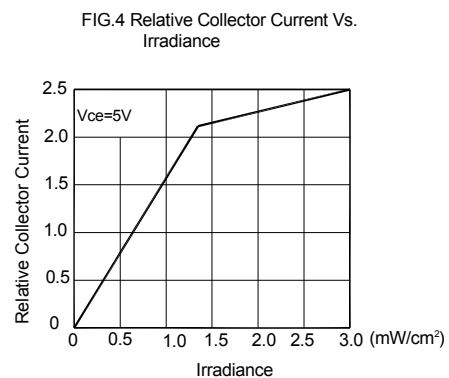
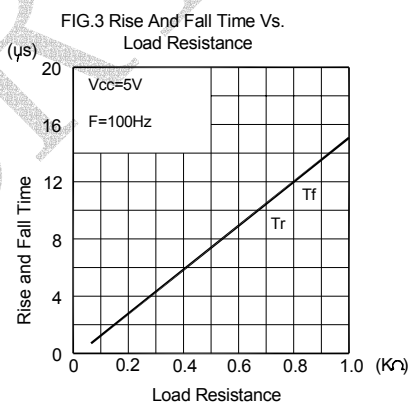
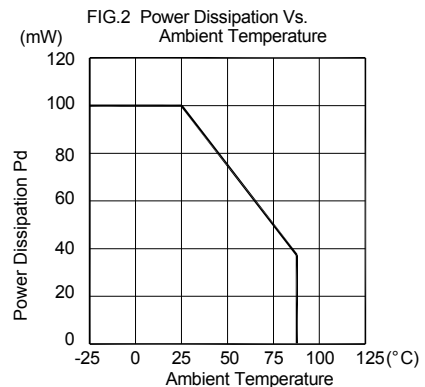
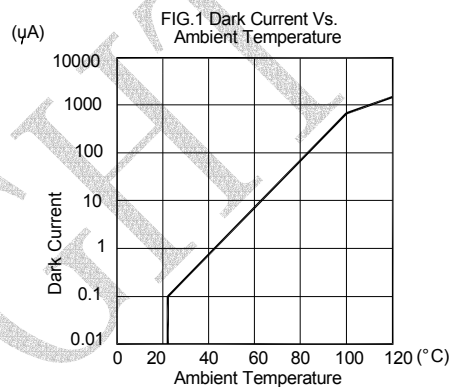
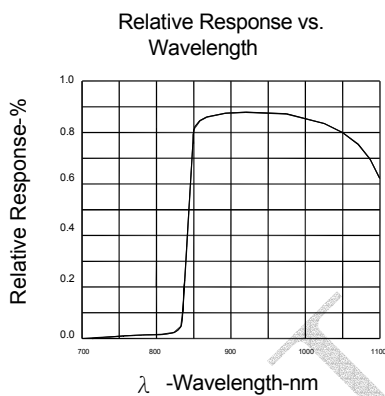
● Absolute Maximum Ratings(Ta=25°C)

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Collector- Emitter Voltage	30	V
Emitter- Collector Voltage	5	V
Operating Temperature	-40°C ~ +85°C	
Storage Temperature Range	-45°C ~ +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

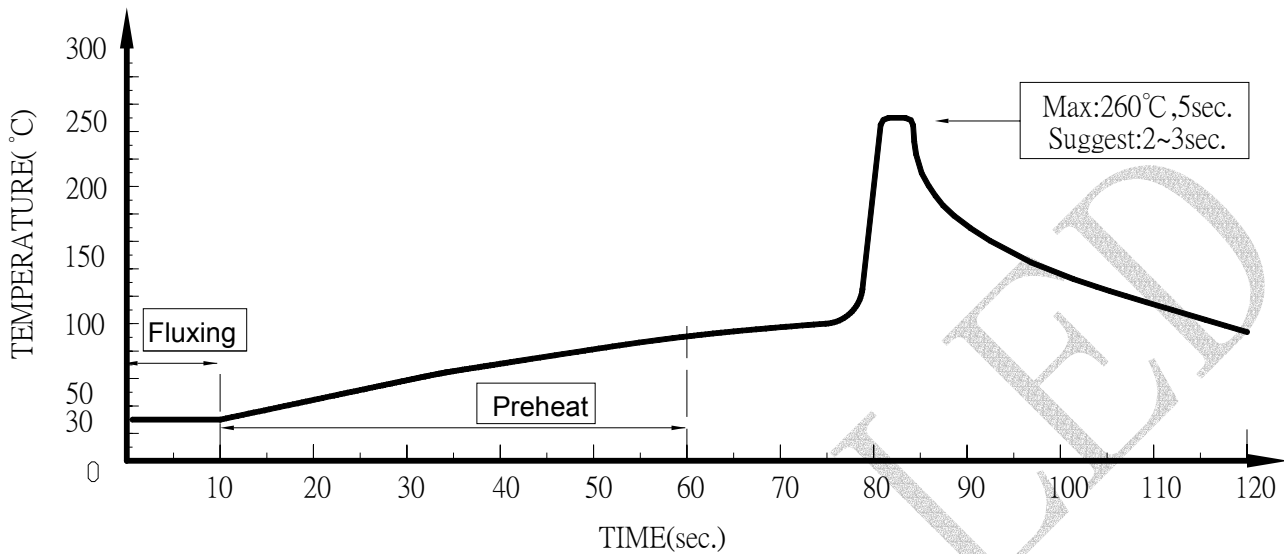
● **Electrical Characteristics** (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector- Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=0.1mA$ $E_e=0mW/cm^2$
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5	-	-	V	$I_R=0.1mA$ $E_e=0 mW/cm^2$
Collector- Emitter Saturation Voltage	$V_{CE(SAT)}$	-	-	0.5	V	$I_C=0.1 mA$ $E_e=1.0 mW/cm^2$
Rise Time	T_r	-	15	-	μS	$V_{CC}=5V$ $R_L=1K\Omega$ $I_C=1mA$
Fall Time	T_f	-	15	-	μS	$V_{CC}=5V$ $R_L=1K\Omega$ $I_C=1mA$
Collector Dark Current	I_{CEO}	-	-	100	nA	$V_{CE}=10V$ $E_e=0 mW/cm^2$
On State Collector Current	$I_{C(ON)}$	-	1.0	-	mA	$V_{CE}=5V$ $E_e=1.0mW/cm^2$

● **Typical Optical-Electrical Characteristic Curves**



● Dip Soldering

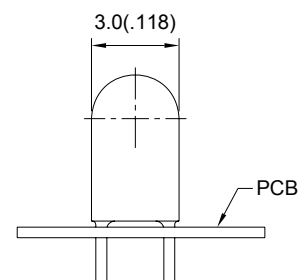


1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

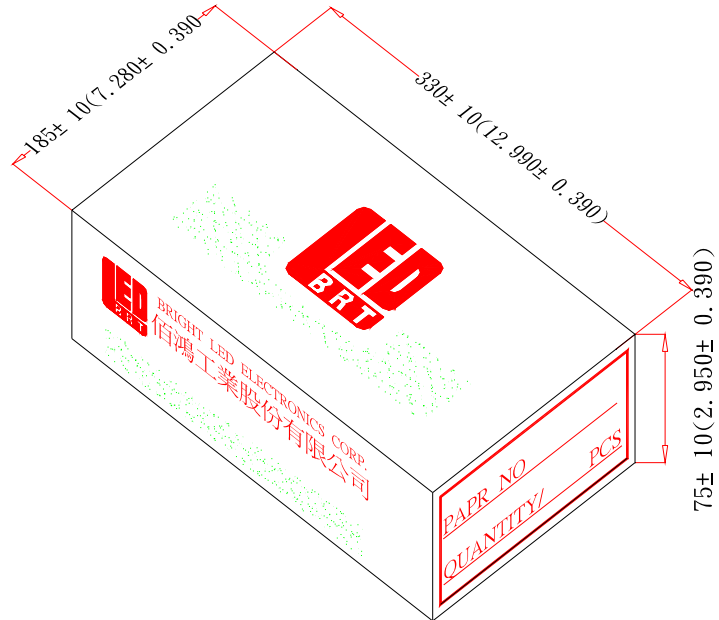
● IRON Soldering

A: Max: 350°C Within 3 sec. One time only.

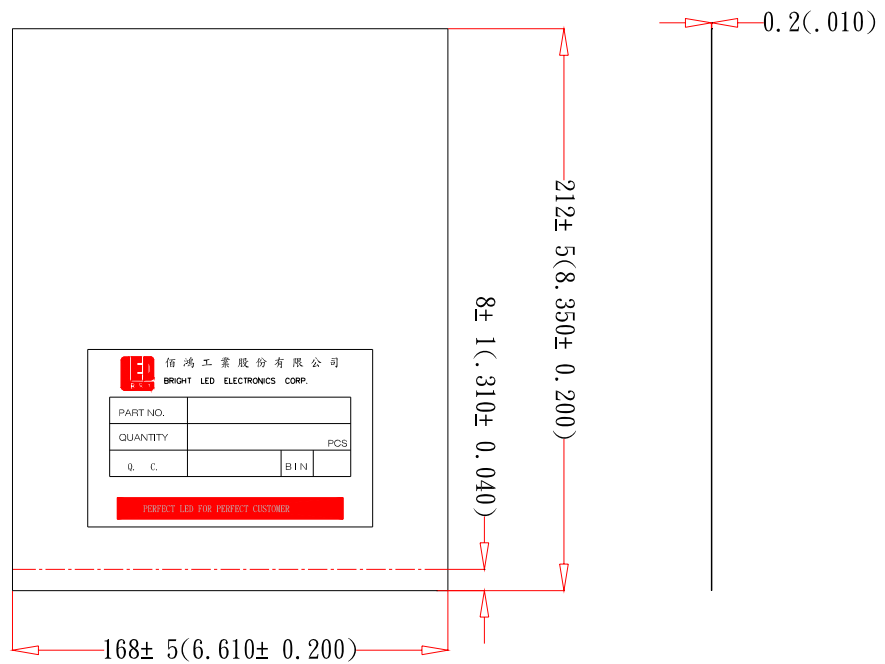
B: The products of 3mm without flange, welding condition of flat plate PCB Max: 350°C Within 2 sec. One time only



● Tapping and packaging specifications(Units: mm)



● Packaging Bag Dimensions



Notes:

- 1、500pcs per bag, 5Kpcs per box.
- 2、All dimensions are in millimeters(inches).
- 3、Specifications are subject to change without notice.



Phototransistor Specification

- Commodity:Phototransistor
- Intensity Bin Limits ($V_{CE}=5V, E_e=1.0mW/cm^2$)

BIN CODE	Min.(mA)	Max.(mA)
N	0.345	0.497
P	0.497	0.716
Q	0.716	1.031
R	1.031	1.485
S	1.485	2.139
T	2.139	3.081
U	3.081	4.313

NOTES: Tolerance of measurement of Radiant Intensity :±15%