

# END- LOOK PACKAGE PHOTOTRANSISTOR

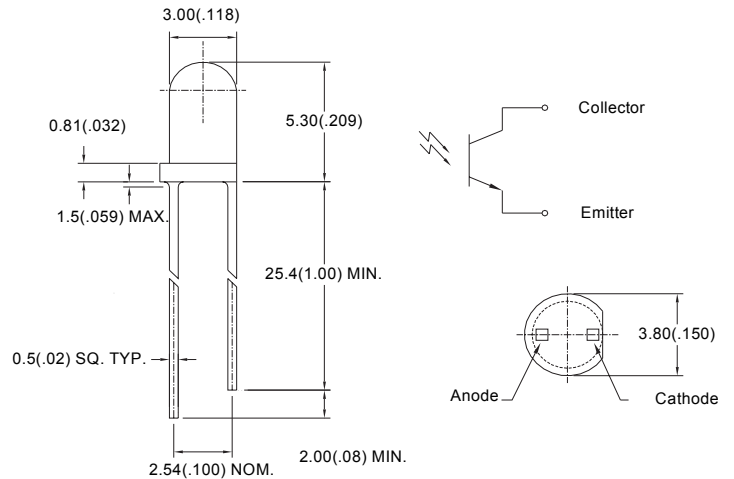
## ● Features

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-BP2941 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 40° 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

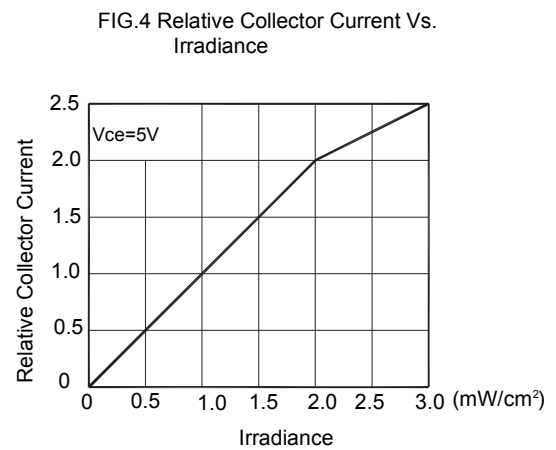
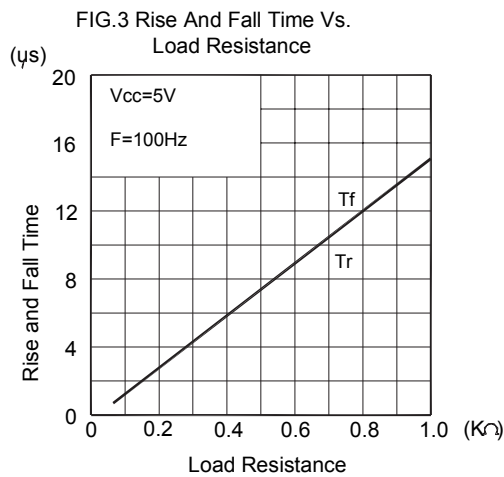
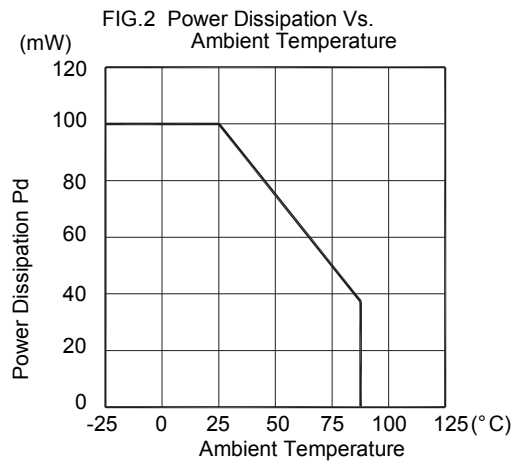
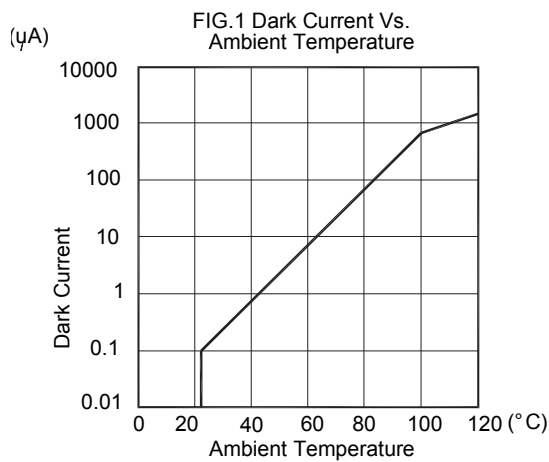
## ● Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

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 ~ +85°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	$T_r$	-	25	-	$\mu S$	$V_{CC}=5V$ $R_L=1K\Omega$ $I_C=1mA$
Fall Time	$T_f$	-	25	-	$\mu S$	$V_{CC}=5V$ $R_L=1K\Omega$ $I_C=1mA$
Collector Dark Current	$I_{CEO}$	-	-	100	nA	$V_{CE}=10V$ $E_e=0 mW/cm^2$
On State Collector Current	$I_{C(ON)}$	-	0.8	-	mA	$V_{CE}=5V$ $E_e=1.0mW/cm^2$

● **Typical Optical-Electrical Characteristic Curves**



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## Phototransistor Specification

- Commodity: Phototransistor
- Collector Current Bin Limits (At 1mW/ cm<sup>2</sup>)

<b>BIN CODE</b>	<b>Min.(mA)</b>	<b>Max.(mA)</b>
L	0.166	0.239
M	0.239	0.345
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

NOTES: Tolerance of measurement of On State Collector Current :±15%

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