



## SIDE- LOOK PACKAGE PHOTOTRANSISTOR

### ● Features

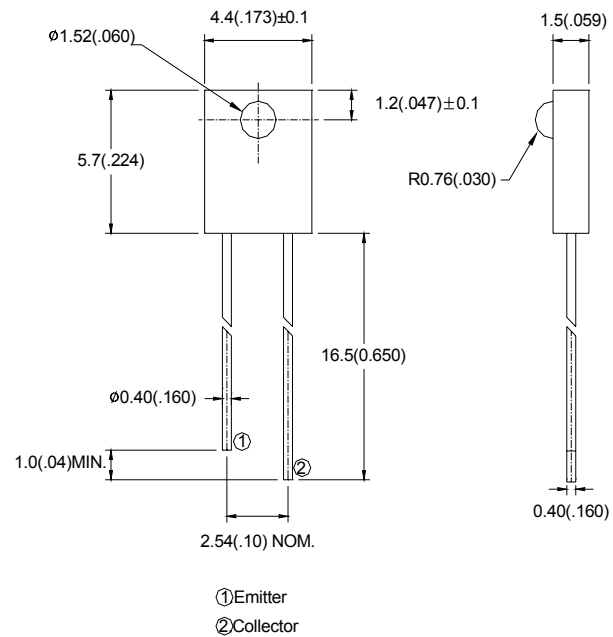
1. Wide range of collector current.
2. High sensitivity.
3. Low cost plastic package.
4. Lens Appearance: Water Clear.
5. This product doesn't contain restriction substance, comply ROHS standard

### ● Description

The BPT-NP03C1 is a NPN silicon phototransistor mounted in a lensed ,water clear plastic package .

The lensing effect of the package allows an acceptance half view angle of 50° 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

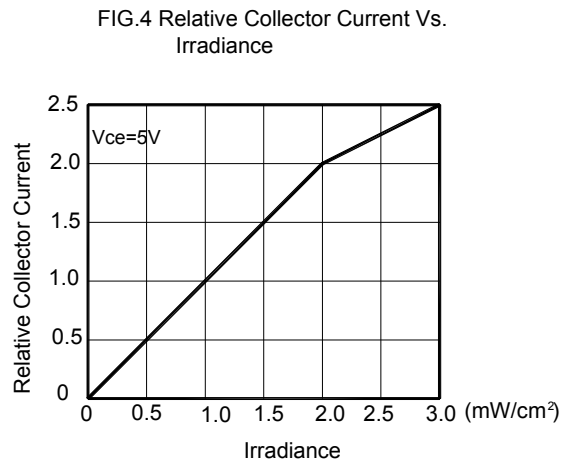
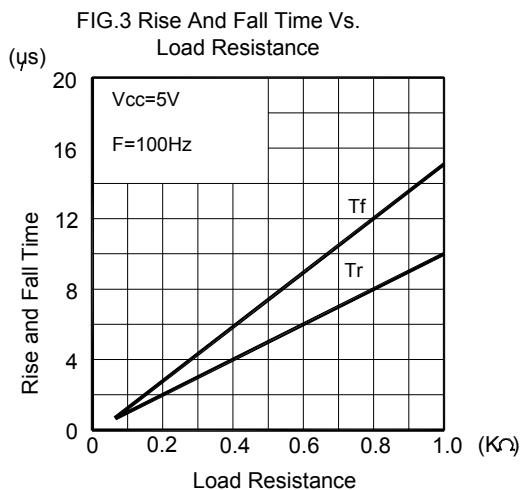
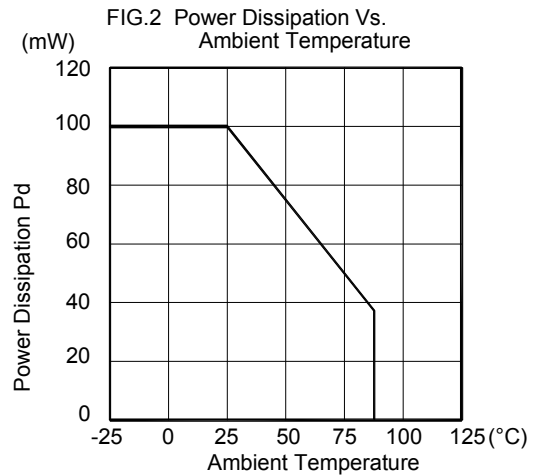
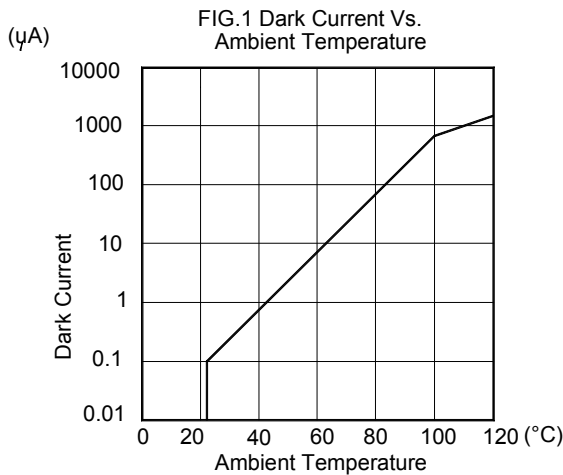
### ● Absolute Maximum Ratings (Ta=25°C)

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

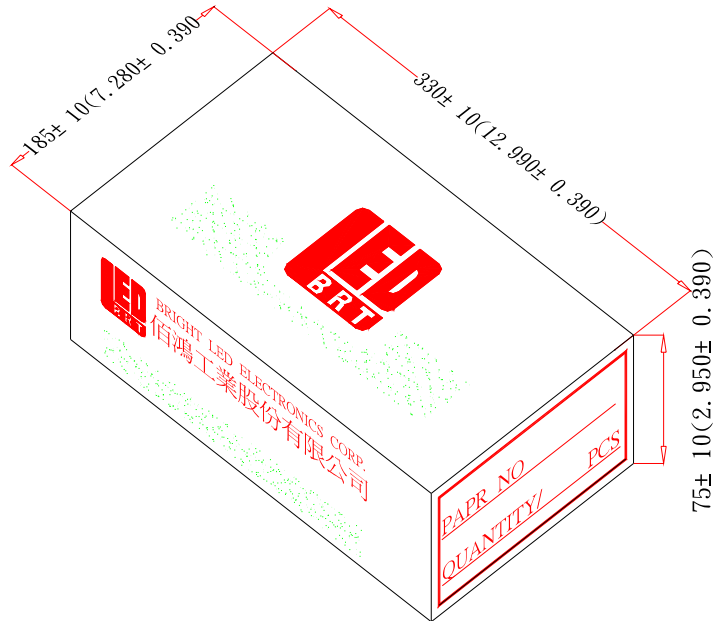
● **Electrical Characteristics** (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector- Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=0.1\text{ mA}$ $E_e=0\text{mW/cm}^2$
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5	-	-	V	$I_R=0.1\text{mA}$ $E_e=0\text{ mW/cm}^2$
Collector- Emitter Saturation Voltage	$V_{CE(SAT)}$	-	-	0.5	V	$I_C=0.1\text{mA}$ $E_e=1.0\text{mW/cm}^2$
Rise Time	$T_r$	-	10	-	$\mu\text{S}$	$V_{CE}=5\text{V}$ $R_L=1\text{K}\Omega$ $F=100\text{HZ}$
Fall Time	$T_f$	-	15	-		
Collector Dark Current	$I_d$	-	-	100	nA	$V_{CE}=10\text{V}$ $E_e=0\text{ mW/cm}^2$
Light Current	$I_{C(ON)}$	-	3.5	-	mA	$V_{CE}=5\text{V}$ $E_e=1.0\text{mW/cm}^2$

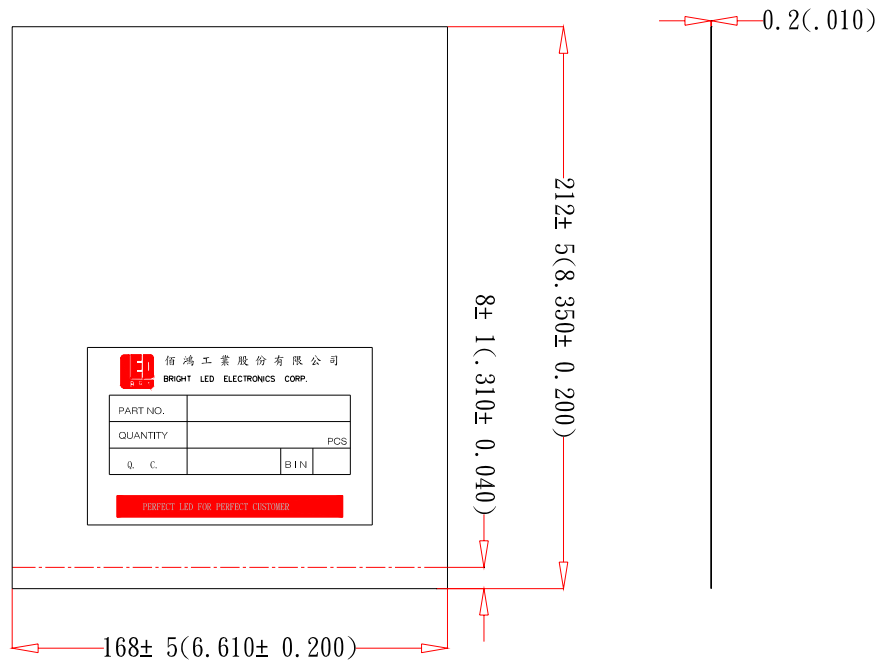
● **Typical Optical-Electrical Characteristic Curves**



● Tapping and packaging specifications(Units: mm)



● Packaging Bag Dimensions



Notes:

- 1、1000pcs per bag, 8Kpcs per box.
- 2、All dimensions are in millimeters(inches).
- 3、Specifications are subject to change without notice.



## Phototransistor Specification

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

BIN CODE	Min.(mA)	Max.(mA)
P0	1.440	3.828
P1	2.552	4.788
P2	3.192	5.460
P3	3.640	6.420
P4	4.280	6.852
P5	5.632	8.808