

# BRIGHT LED ELECTRONICS CORP.

BPT-NP03C1

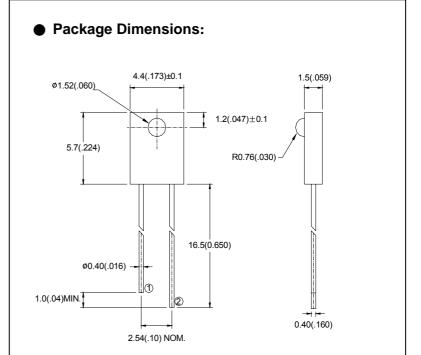
# SIDE- LOOK PACKAGE PHOTOTRANSISTOR

#### Features

- 1. Wide range of collector current.
- 2. High sensitivity.
- 3. Low cost plastic package.
- 4. Lens Appearance: Water Clear.
- 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 .



#### NOTES:

- 1.All dimensions are in millimeters (inches).
- 2.Tolerance is ±0.25mm (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

(1)Emitter

2)Collector

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

Power Dissipation	M. xiii ur n Flating	<b>Unit</b> mW
Collector- Emitter Voltage	30	V
En it e - Collecto Voltage Operating Temperature	rtleo.cc	<b>M</b> ∨ 5℃
Storage Temperature Range	-45℃~+100℃	
Lead Soldering Temperature	260°C for 5 seconds	



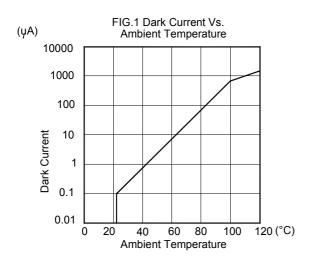
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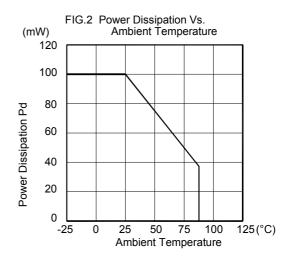
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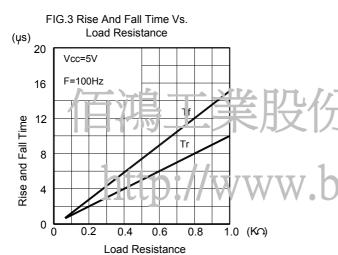
#### ● Electrical Characteristics (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector- Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	30	-	-	V	I <sub>C</sub> =0.1 mA Ee=0mW/cm <sup>2</sup>
Emitter-Collector Breakdown Voltage	V <sub>(BR)ECO</sub>	5	-	-	V	I <sub>R</sub> =0.1mA Ee=0 mW/cm <sup>2</sup>
Collector- Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	-	ı	0.5	V	I <sub>C</sub> =0.1mA Ee=1.0mW/cm <sup>2</sup>
Rise Time	Tr	-	10	-	μS	$V_{CE}$ =5 $V$ $R_L$ =1 $K\Omega$ $F$ =100 $HZ$
Fall Time	T <sub>f</sub>	-	15	-		
Collector Dark Current	I <sub>d</sub>	-	-	100	nA	V <sub>CE</sub> =10V E <sub>e</sub> =0 mW/cm <sup>2</sup>
Light Current	I <sub>C (ON)</sub>	-	3.5	-	mA	V <sub>CE</sub> =5V E <sub>e</sub> =1.0mW/cm <sup>2</sup>

### ● Typical Optical-Electrical Characteristic Curves







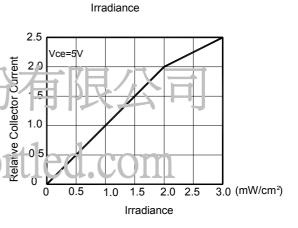


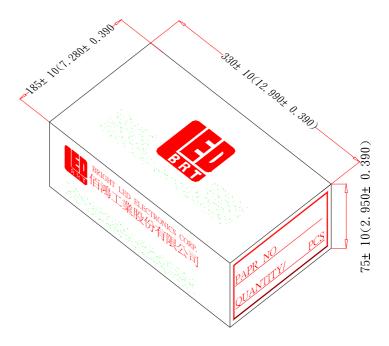
FIG.4 Relative Collector Current Vs.



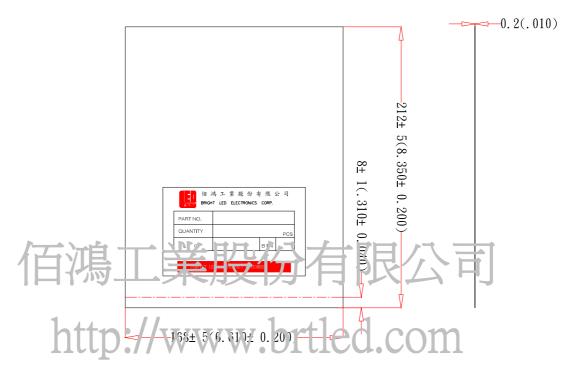
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### Tapping and packaging specifications(Units: mm)



### 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.