

#### 3.5x2.8mm PHOTOTRANSISTOR

Part Number: AA3528P3C

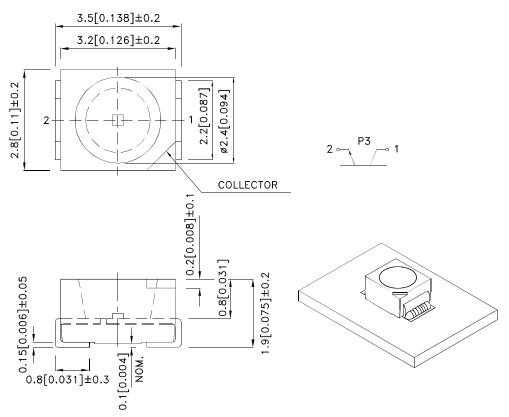
#### **Features**

- Mechanically and spectrally matched to the infrared emitting LED lamp.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

#### Description

Made with NPN silicon phototransistor chips.

#### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

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#### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Min.	Тур.	Max.	Units	Test Conditions
VBR CEO	Collector-to-Emitter Breakdown Voltage	30			V	Ic=100uA Ee=0mW/c m²
VBR ECO	Emitter-to-Collector Breakdown Voltage	5			V	IE=100uA Ee=0mW/c m³
VCE (SAT)	Collector-to-Emitter Saturation Voltage			0.8	V	Ic=2mA Ee=20mW/c m³
I CEO	Collector Dark Current			100	nA	Vc=10V Ee=0mW/c m³
TR	Rise Time (10% to 90%)		15		us	VcE = 5V Ic=1mA RL=1000Ω
TF	Fall Time (90% to 10%)		15		us	
I (ON)	On State Collector Current	0.2	0.4		mA	VcE = 5V Ee=1mW/c m <sup>2</sup> λ=940nm

#### Absolute Maximum Ratings at TA=25°C

Parameter	Max.Ratings			
Collector-to-Emitter Voltage	30V			
Emitter-to-Collector Voltage	5V			
Power Dissipation at (or below) 25°C Free Air Temperature	100mW			
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

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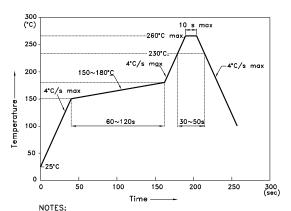
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

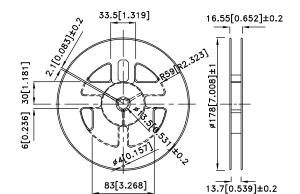
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - to high temperature.

    3.Number of reflow process shall be 2 times or less.

### Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

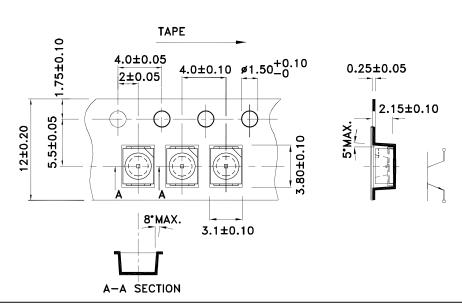
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### **Reel Dimension**



## Tape Specifications (Units : mm)

1.5



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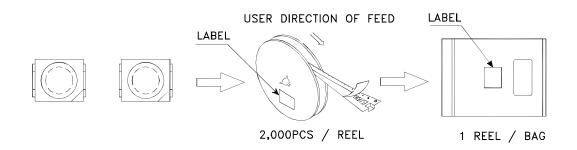
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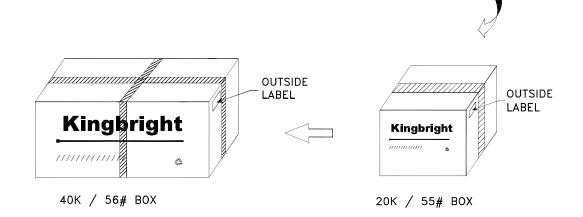
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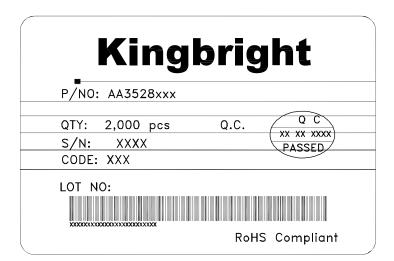
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#### **PACKING & LABEL SPECIFICATIONS**

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All design applications should refer to Kingbright application notes available at <a href="http://www.KingbrightUSA.com/ApplicationNotes">http://www.KingbrightUSA.com/ApplicationNotes</a>

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