

Part Number: APT2012P3BT

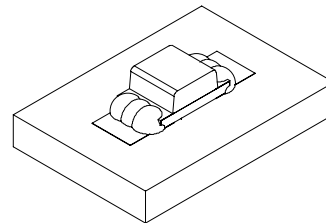
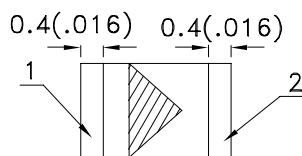
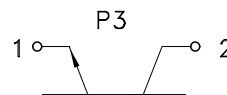
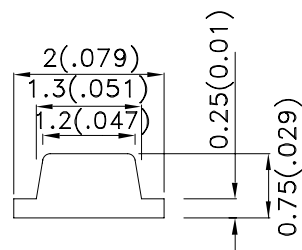
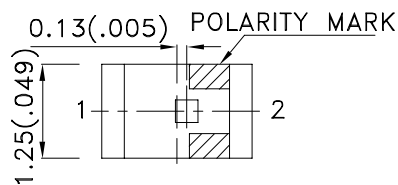
### Features

- 2.0mmx1.25mm SMT LED,0.75mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO INFRARED EMITTING LED LAMP.
- BLUE TRANSPARENT LENS.
- PACKAGE: 2000PCS / REEL .
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

### Description

Made with NPN silicon phototransistor chips.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



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

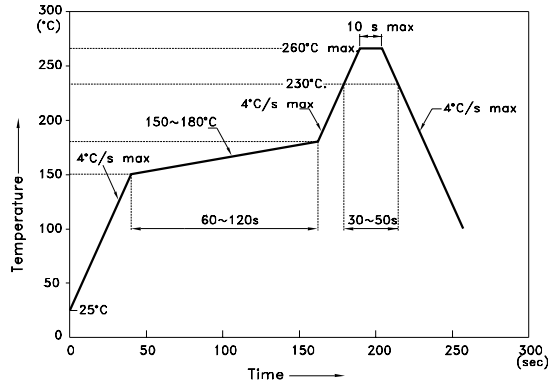
Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
V <sub>BR CEO</sub>	Collector-to-Emitter Breakdown Voltage	30			V	I <sub>C</sub> =100uA E <sub>e</sub> =0mW/c m <sup>2</sup>
V <sub>BR ECO</sub>	Emitter-to-Collector Breakdown Voltage	5			V	I <sub>E</sub> =100uA E <sub>e</sub> =0mW/c m <sup>2</sup>
V <sub>CE (SAT)</sub>	Collector-to-Emitter Saturation Voltage			0.8	V	I <sub>C</sub> =2mA E <sub>e</sub> =20mW/c m <sup>2</sup>
I <sub>CEO</sub>	Collector Dark Current			100	nA	V <sub>CE</sub> =10V E <sub>e</sub> =0mW/c m <sup>2</sup>
T <sub>R</sub>	Rise Time (10% to 90% )		15		us	V <sub>CE</sub> = 5V I <sub>C</sub> =1mA R <sub>L</sub> =1000Ω
T <sub>F</sub>	Fall Time (90% to 10% )		15		us	
I <sub>(ON)</sub>	On State Collector Current	0.1	1		mA	V <sub>CE</sub> = 5V E <sub>e</sub> =1mW/c m <sup>2</sup> λ=940nm
2θ1/2	Viewing Angle		120		deg	

## 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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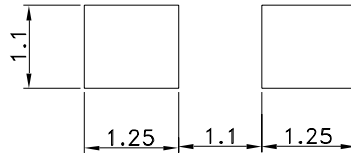
Reflow Soldering Profile For Lead-free SMT Process.



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

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



### Tape Specifications (Units : mm)

