

Part Number: KP-2012P3C

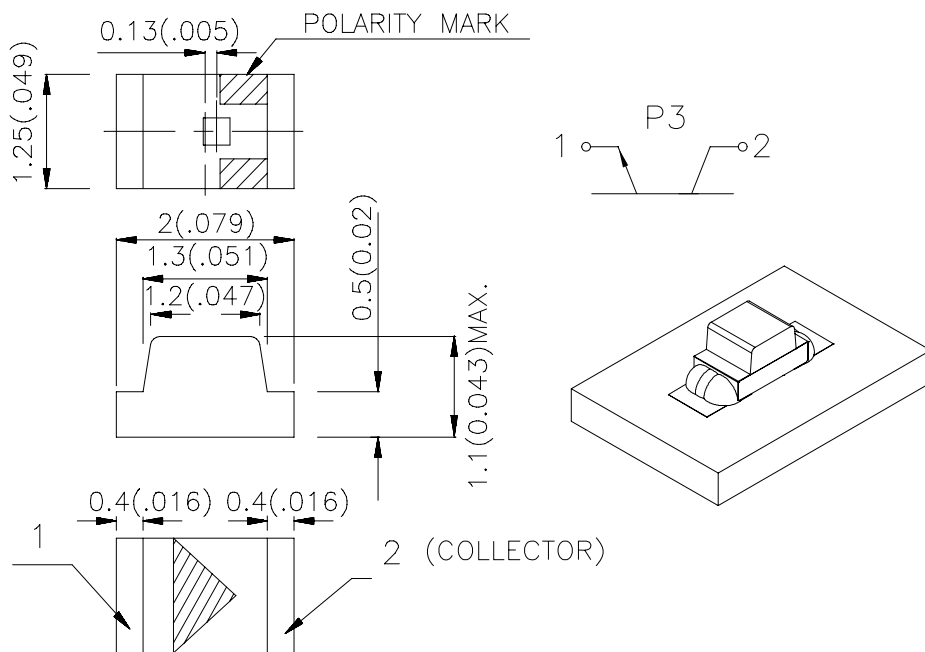
Features

- 2.0mmx1.25mm SMT LED, 1.1mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO THE INFRARED EMITTING LED LAMP.
- WATER CLEAR LENS.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

P3 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.

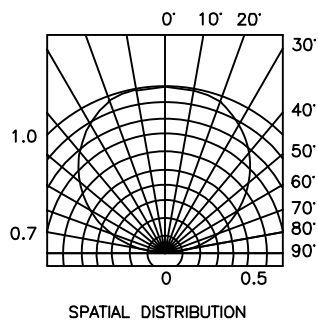


Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
$V_{BR\ CEO}$	Collector-to-Emitter Breakdown Voltage	30	-	-	V	$I_C=100\mu\text{A}$ $E_e=0\text{mW}/\text{cm}^2$
$V_{BR\ ECO}$	Emitter-to-Collector Breakdown Voltage	5	-	-	V	$I_E=100\mu\text{A}$ $E_e=0\text{mW}/\text{cm}^2$
$V_{CE(SAT)}$	Collector-to-Emitter Saturation Voltage	-	-	0.8	V	$I_C=2\text{mA}$ $E_e=20\text{mW}/\text{cm}^2$
I_{CEO}	Collector Dark Current	-	-	100	nA	$V_{CE}=10\text{V}$ $E_e=0\text{mW}/\text{cm}^2$
T_R	Rise Time (10% to 90%)	-	15	-	us	$V_{CE} = 5\text{V}$ $I_C=1\text{mA}$ $R_L=1000\Omega$
T_F	Fall Time (90% to 10%)	-	15	-	us	
$I_{(ON)}$	On State Collector Current	0.1	0.3	-	mA	$V_{CE} = 5\text{V}$, $E_e=1\text{mW}/\text{cm}^2$, $\lambda=940\text{nm}$
$2\theta_{1/2}$	Viewing Angle	-	120	-	deg	-

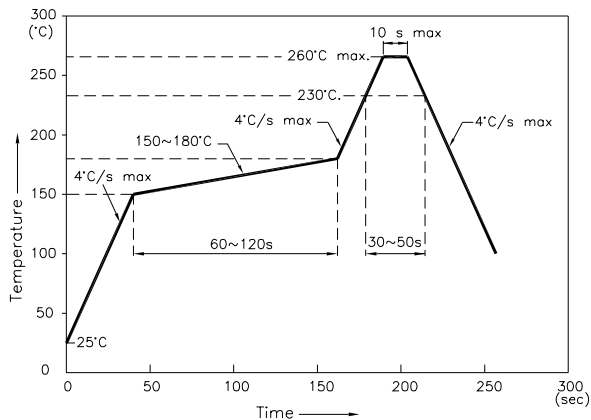
Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

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 Range	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Storage Temperature Range	$-40^\circ\text{C} \sim +85^\circ\text{C}$



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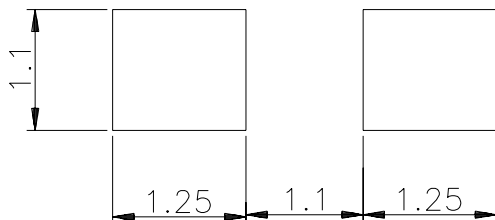
Reflow Soldering Profile For Lead-free SMT Process.



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)

