

Kingbright®

2.0mm x 1.2mm (0805)PHOTOTRANSISTOR

KP-2012P3C

KP-2012P3BT

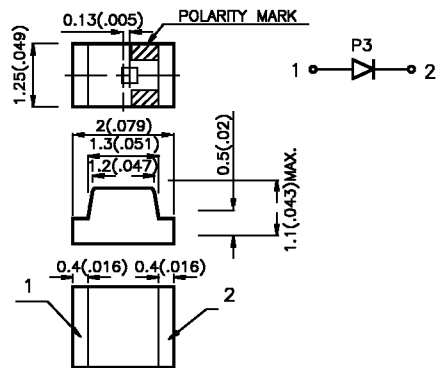
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE KPA-3010 SERIES INFRARED EMITTING LED LAMP.
- WATER CLEAR LENS.

Description

Made with NPN silicon phototransistor chips.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

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

Parameter	Maximum Rating
Collector-to-Emitter Breakdown Voltage	30V
Emitter-to-Collector Breakdown Voltage	5V
Power Dissipation at (or below) 25 °C Free Air Temperature	100mW
Operating Temperature Range	-40 °C ~ +85 °C
Storage Temperature Range	-40 °C ~ +85 °C
Lead Soldering Temperature (4mm for 5sec)	260 °C

Electrical and Radiant Characteristics $T_A=25^\circ\text{C}$

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
V_{BRCEO}	Collector-to-Emitter Breakdown Voltage	30	-	-	V	$I_C=100\mu\text{A}$ $I_B=0$
V_{BRECO}	Emitter-to-Collector Breakdown Voltage	5	-	-	V	$I_E=100\mu\text{A}$ $I_B=0$
$V_{CE(SAT)}$	Collector-to-Emitter Saturation Voltage	-	-	0.8	V	$I_C=0.1\text{mA}$ $H=2.5\text{mW/cm}^2$
I_{CEO}	Collector Dark Current	-	-	100	nA	$V_{CE}=10\text{V}$ $H=0\text{mW/cm}^2$
T_R	Rise Time (10% to 90%)	-	3	-	us	$V_{CE}=5\text{V}$ $I_C=1\text{mA}$
T_F	Fall Time (90% to 10%)	-	3	-	us	$R_L=100\text{ ohms}$
$I_{(ON)}$	On State Collector Current	0.1	-	0.3	mA	$V_{CE}=5\text{V}$ $E_p=1\text{mW/cm}^2$ $\lambda=940\text{nm}$

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