

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KP-2012PBC-A	BLUE (InGaN)	WATER CLEAR	18	60	120°

Notes:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous Intensity / Luminous Flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	468		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Blue	470		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	21		nm	I _F =20mA
C	Capacitance	Blue	100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue	3.2	4.0	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

Notes:

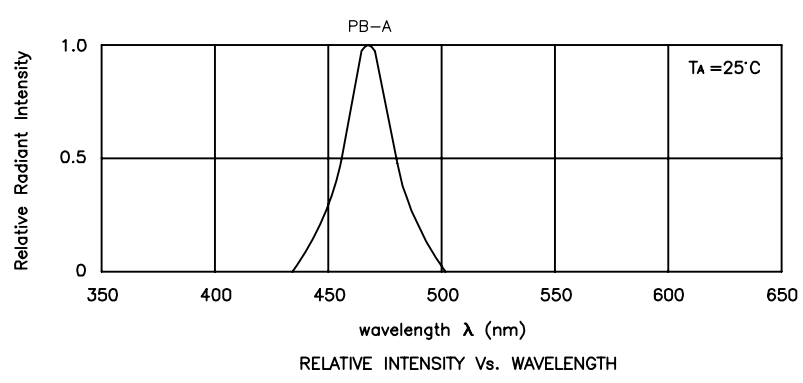
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at T_A=25°C

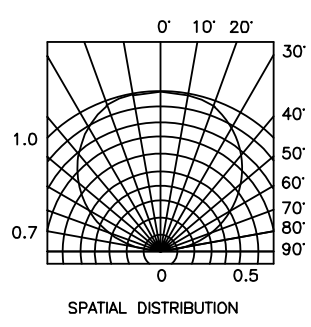
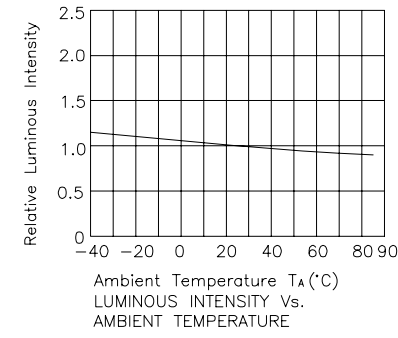
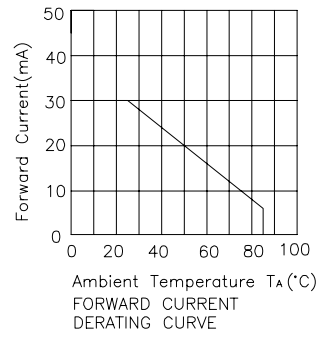
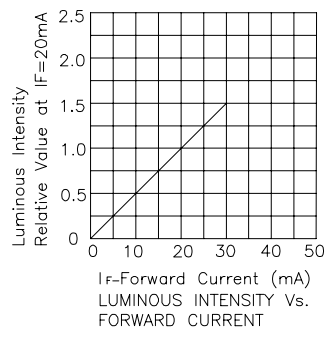
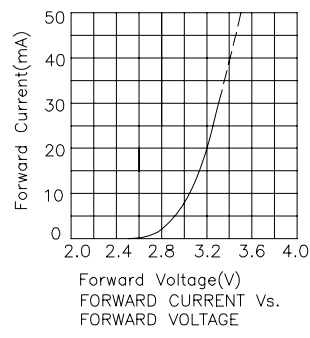
Parameter	Blue	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

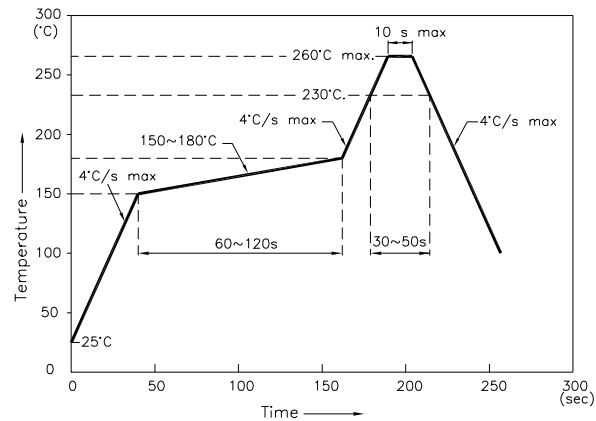


Blue KP-2012PBC-A



KP-2012PBC-A

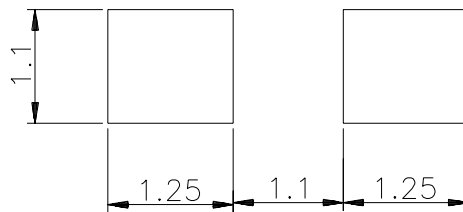
Reflow Soldering Profile For Lead-free SMT Process.



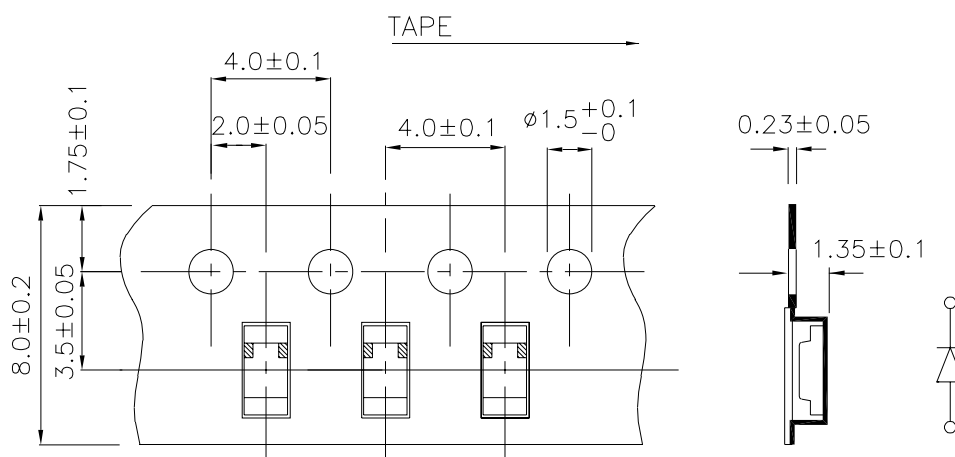
NOTES:

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)

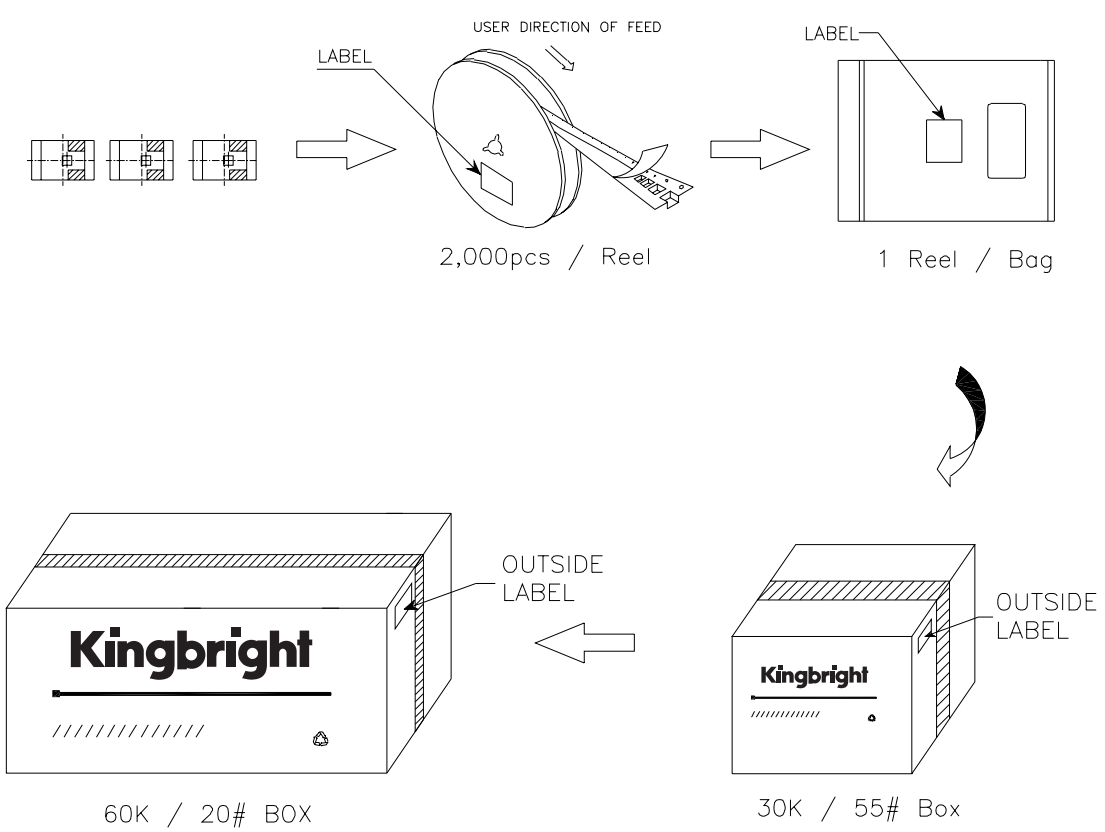


Tape Specifications (Units: mm)



PACKING & LABEL SPECIFICATIONS

KP-2012PBC-A



Kingbright		
P/NO: KP-2012XXX		
QTY: 2,000 pcs	Q.C.	Q.C. xx xx XXXX
S/N: XXXX	PASSED	
CODE: XXX	Date	
LOT NO:		
		
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
RoHS Compliant		