# Kingbright

KP-2012YC   YELLOW

Features

● 2.0mmx1.25mm SMT LED, 1.1mm THICKNESS.

● LOW POWER CONSUMPTION.

● WIDE VIEWING ANGLE.

● IDEAL FOR BACKLIGHT AND INDICATOR.

● VARIOUS COLORS AND LENS TYPES AVAILABLE.

● PACKAGE : 2000PCS / REEL.

Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions
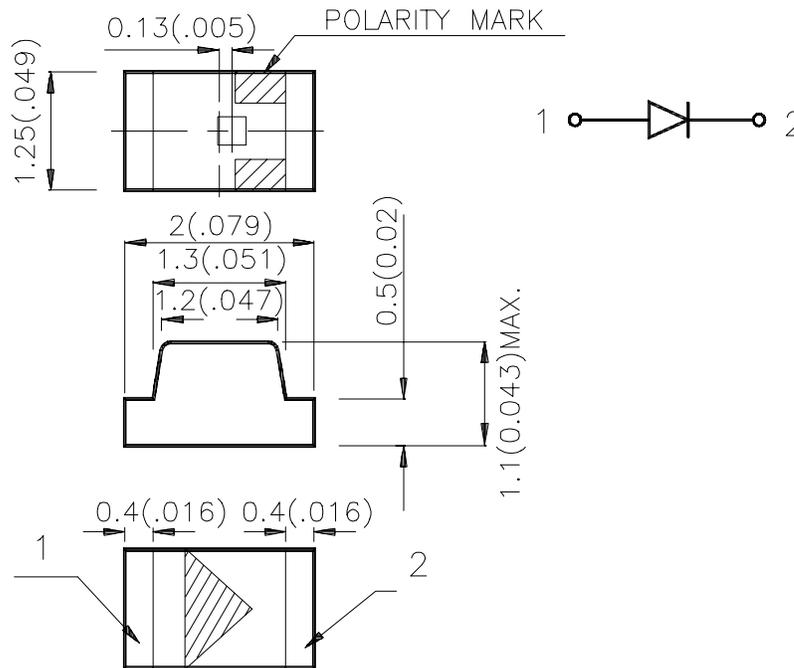
Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
			Min.	Typ.	2θ1/2
KP-2012YC	YELLOW (GaAsP/ GAP)	WATER CLEAR	2.6	8	120°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Yellow	590		nm	I_F=20mA
λD	Dominate Wavelength	Yellow	588		nm	I_F=20mA
$\Delta\lambda$1/2	Spectral Line Half-width	Yellow	35		nm	I_F=20mA
C	Capacitance	Yellow	20		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Yellow	2.1	2.5	V	I_F=20mA
I_R	Reverse Current	Yellow		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Yellow	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

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RELATIVE INTENSITY Vs. WAVELENGTH

Yellow   KP-2012YC

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE


SPATIAL DISTRIBUTION

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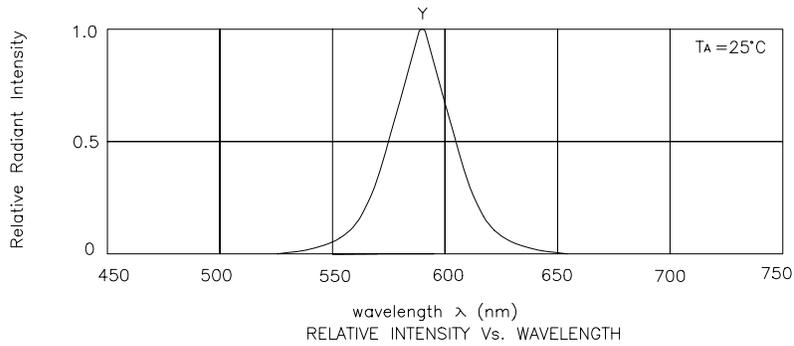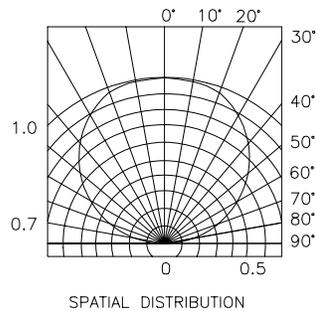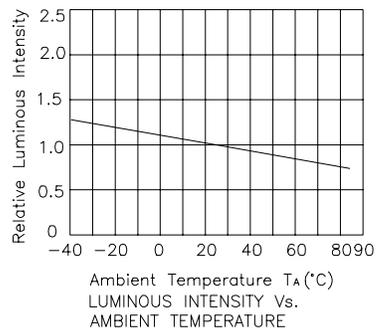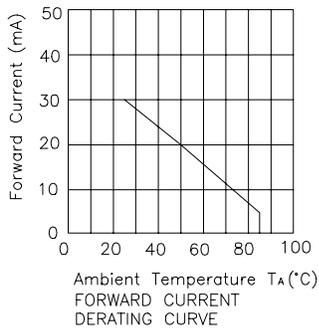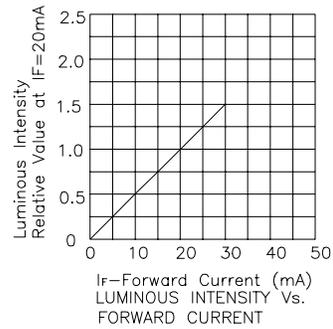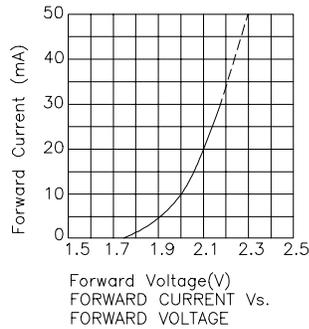
KP-2012YC
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling
process to normal temperature is required between first and
second soldering process.
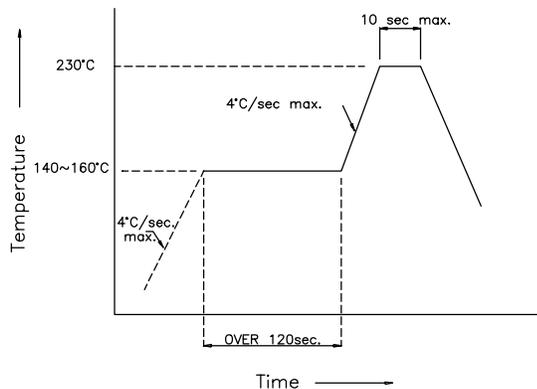
Recommended Soldering Pattern
(Units : mm)
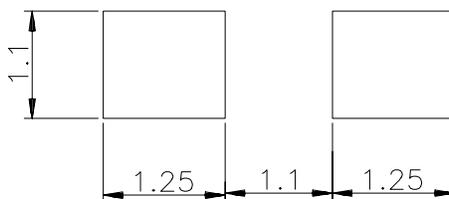
Tape Specifications
(Units : mm)