

Kingbright

3.2x1.6mm SMD CHIP LED LAMP

APTR3216SYC

SUPER BRIGHT YELLOW

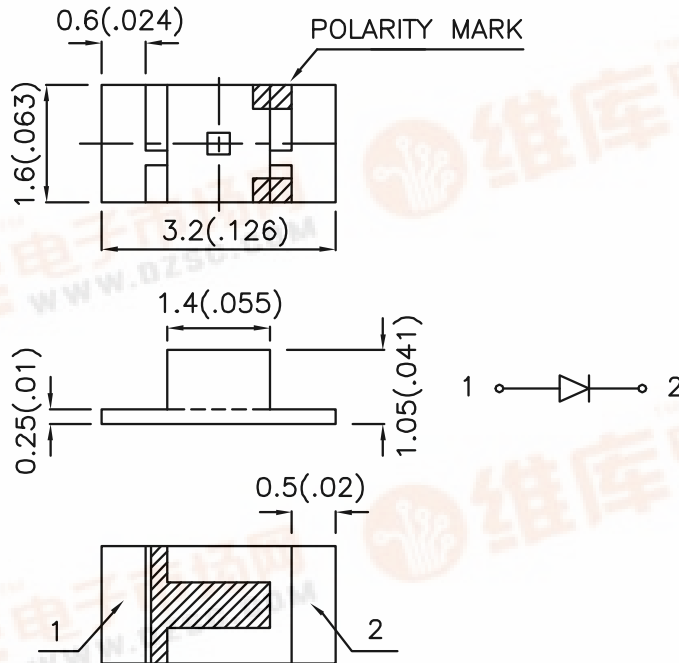
Features

- 3.2mmx1.6mm SMT LED,1.05mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VAVRIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

The Super Bright Yellow device is made with DH InGaAlP (on GaAs substrate) light emitting diode chip.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



Kingbright

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
APTR3216SYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	36	150	120°

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
λ_D	Dominant Wavelength	Super Bright Yellow	588		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow	28		nm	IF=20mA
C	Capacitance	Super Bright Yellow	25		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
IR	Reverse Current	Super Bright Yellow		10	uA	VR = 5V

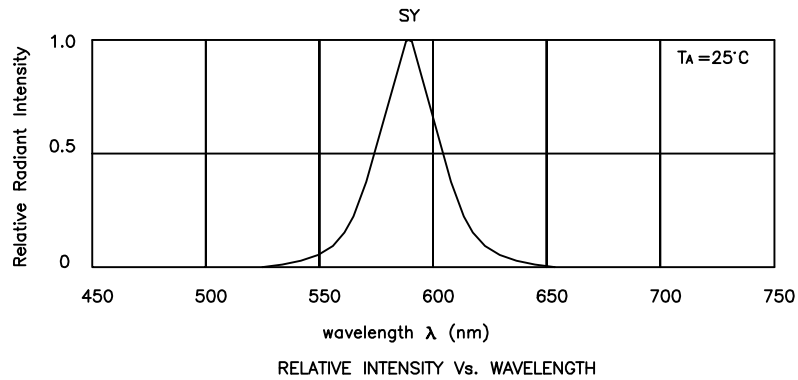
Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Notes:

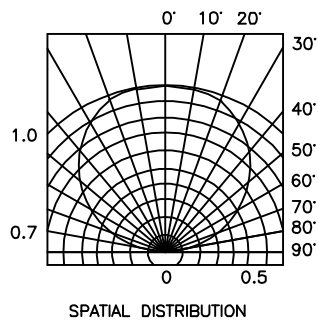
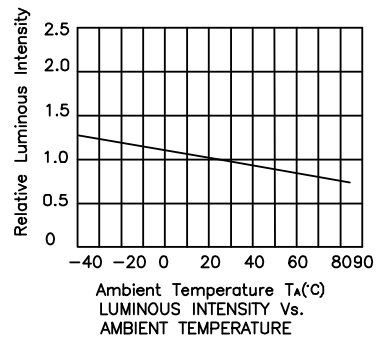
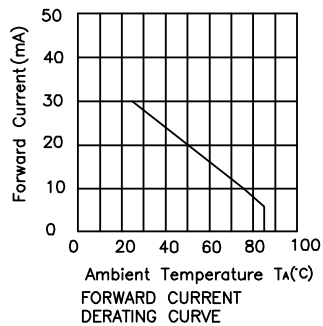
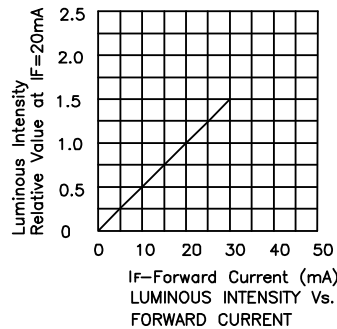
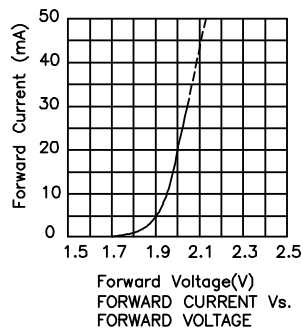
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

Kingbright



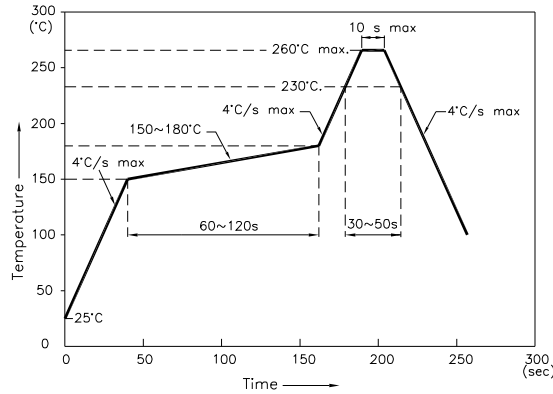
Super Bright Yellow

APTR3216SYC



APTR3216SYC

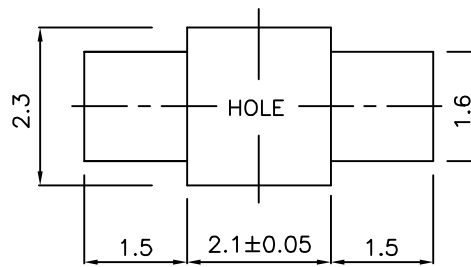
Reflow Soldering Profile For Lead-free SMT Process.



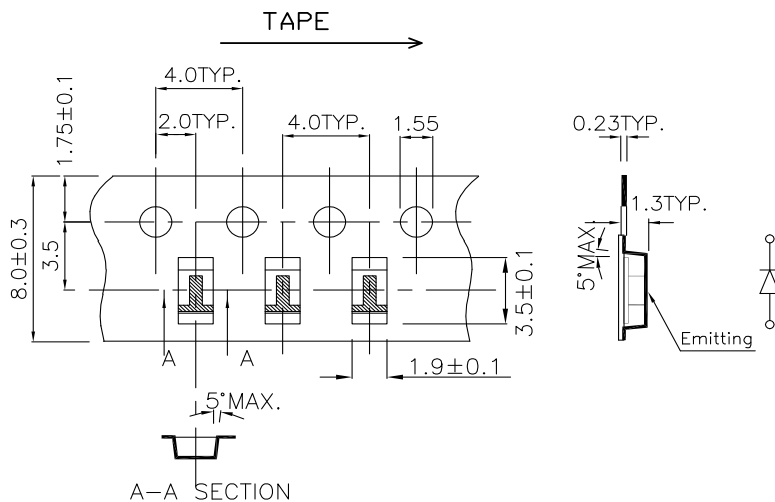
NOTES:

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)



Tape Specifications (Units : mm)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
2. Luminous intensity: +/-15% (Test condition is based on the sorting standard).
3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).