3.5 x2.8mm SMD CHIP LED LAMP

P/N: KPED-3528SYC SUPER BRIGHT YELLOW

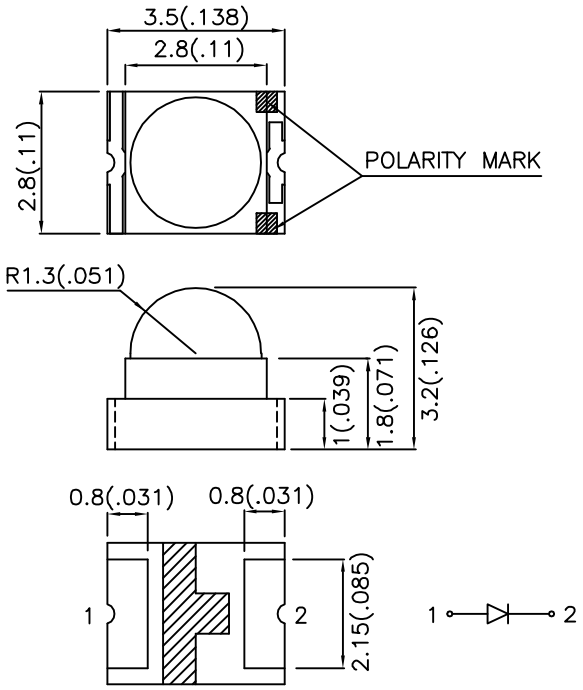
Features

- ●SINGLE COLOR.
- ●SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- ●IDEAL FOR BACKLIGHTING.
- ●AVAILABLE ON TAPE AND REEL.
- ●PACKAGE: 500PCS / 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 ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KPED-3528SYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	70	250	40°

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

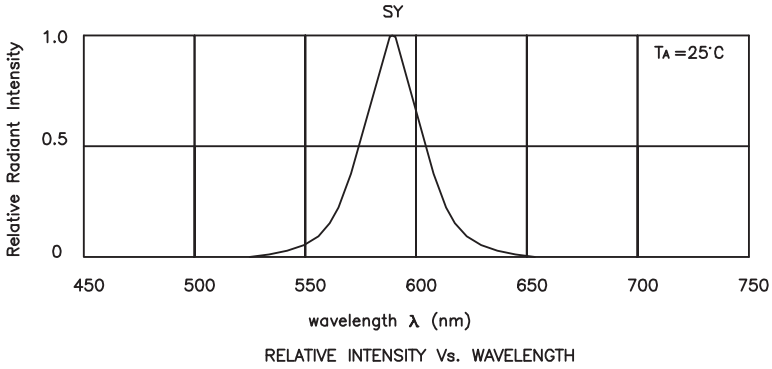
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	I_F=20mA
λD	Dominant Wavelength	Super Bright Yellow	588		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	28		nm	I_F=20mA
C	Capacitance	Super Bright Yellow	25		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Super Bright Yellow	2.0	2.5	V	I_F=20mA
I_R	Reverse Current	Super Bright Yellow		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

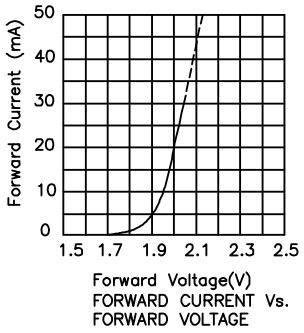
Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

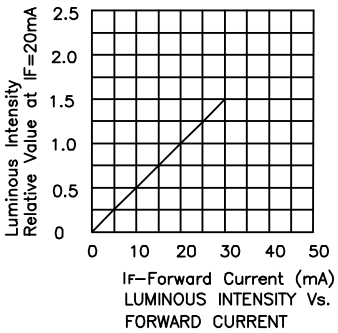


RELATIVE INTENSITY Vs. WAVELENGTH

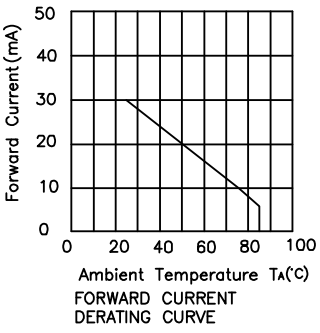
Super Bright Yellow **KPED-3528SYC**



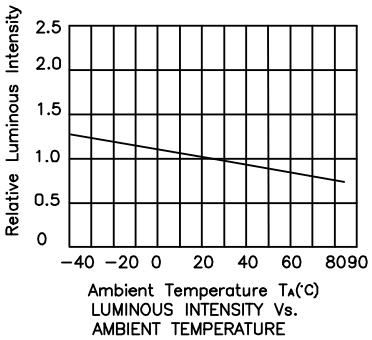
FORWARD CURRENT Vs.
FORWARD VOLTAGE



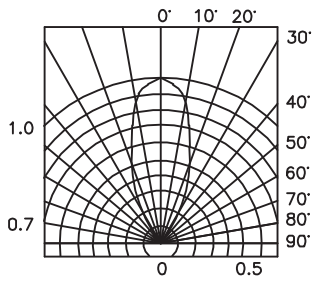
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



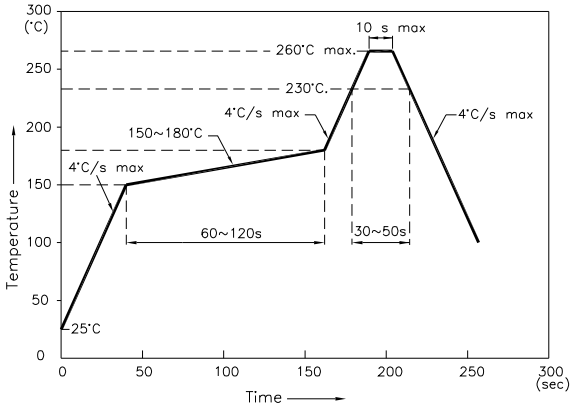
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

KPED-3528SYC

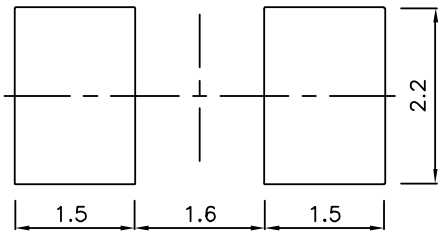
Reflow Soldering Profile For Lead-free SMT Process.



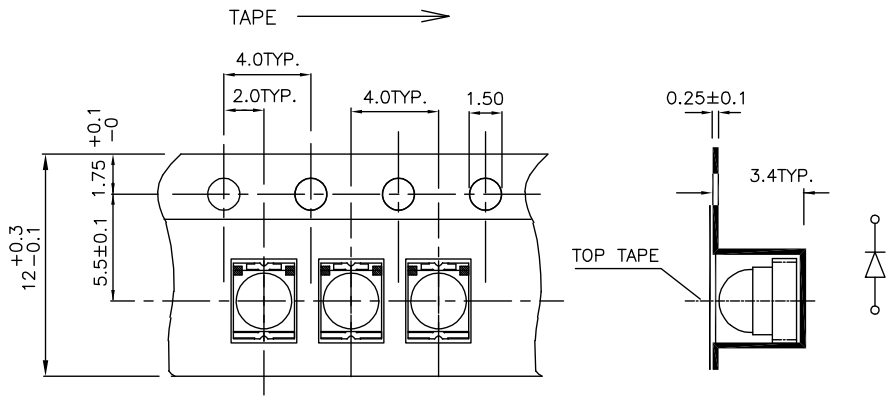
NOTES:

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 special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.