Honglitronic®

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

HL-AA-2810U3YC YELLOW

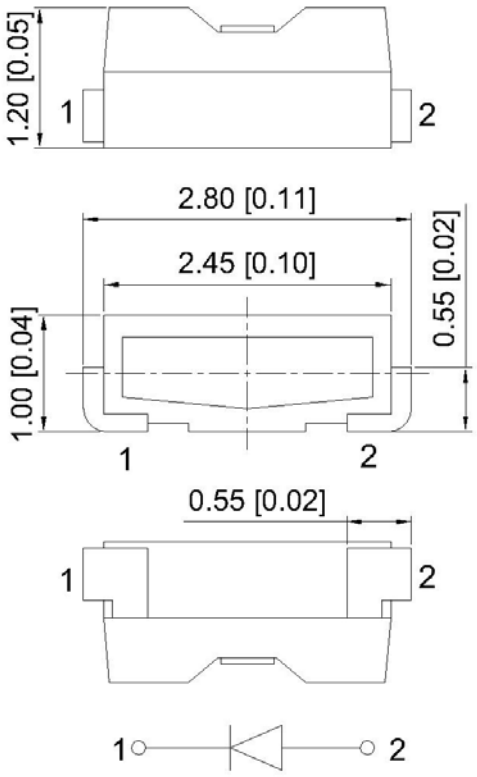
Features

- 2.8mmX1.0mm RIGHT ANGLE SMT LED, 1.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 3000PCS / REEL .

Description

The Yellow source color devices are made with AlGaInP on sapphire Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimension units are millimeters.

2.All dimension tolerance is ±0.2mm unless otherwise noted.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
HL-AA-2810U3YC	YELLOW (AlGaInP)	WATER CLEAR	160	250	90°

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	Min.	Typ.	Units	Test Conditions
λD	Dominate Wavelength	Yellow	585	590	nm	I_F=20mA
C	Capacitance	Yellow		30	pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Yellow	1.8	2.0	V	I_F=20mA
I_R	Reverse Current	Yellow	—	5	uA	V_R= 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Yellow	Units
Power dissipation	70	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +100°C	

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

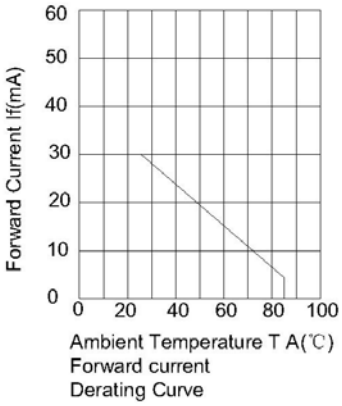
YELLOW **HL-AA-2810U3YC**

Reliability Test Items And Conditions

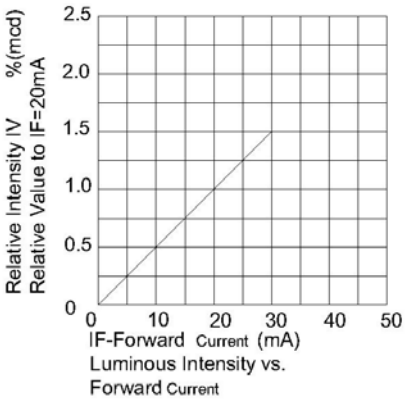
The reliability of products shall be satisfied with items listed below.
Confidence level :90% LTPD :10%

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Re
1	Reflow	Temp:260℃max T=5 sec max.	1times.	22Pcs.	0/1
2	Temperature Cycle	100℃±5℃ 30 min. ↑↓5 min -40℃±5℃ 30 min.	100 Cycles	22Pcs.	0/1
3	Thermal Shock	100℃±5℃ 5 min. ↑↓ -40℃±5℃ 5 min.	100 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp.:100℃±5℃	1000Hrs.	22Pcs.	0/1
5	Low Temperature Storage	Temp.:-40℃±5℃	1000Hrs.	22Pcs.	0/1
6	DC Operating Life	Ta=25℃±5℃ IF=20mA	1000Hrs.	22Pcs.	0/1
7	High Temperature/High Humidity	85℃±5℃/ 85%RH IF=5mA	1000Hrs.	22Pcs.	0/1

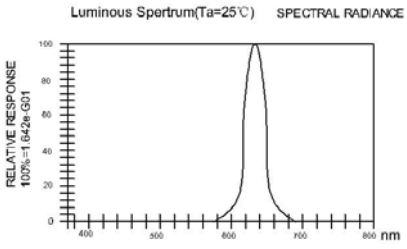
*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.

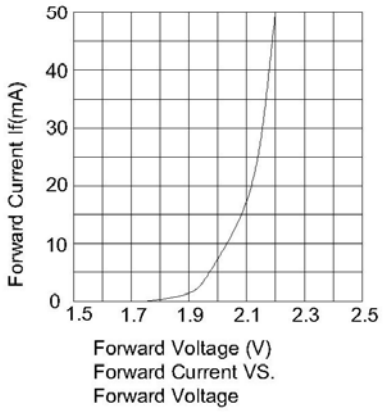


Forward current
Derating Curve

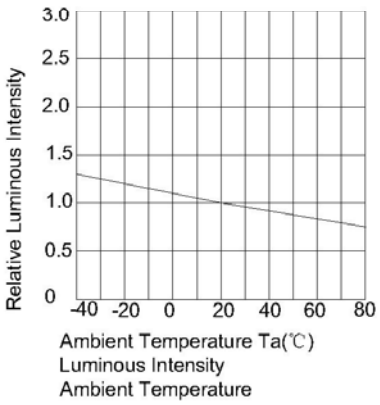


Luminous Intensity vs.
Forward Current

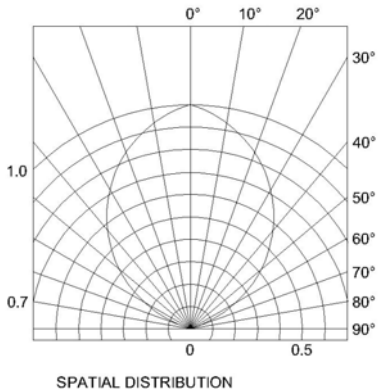




Forward Current VS.
Forward Voltage



Luminous Intensity
Ambient Temperature

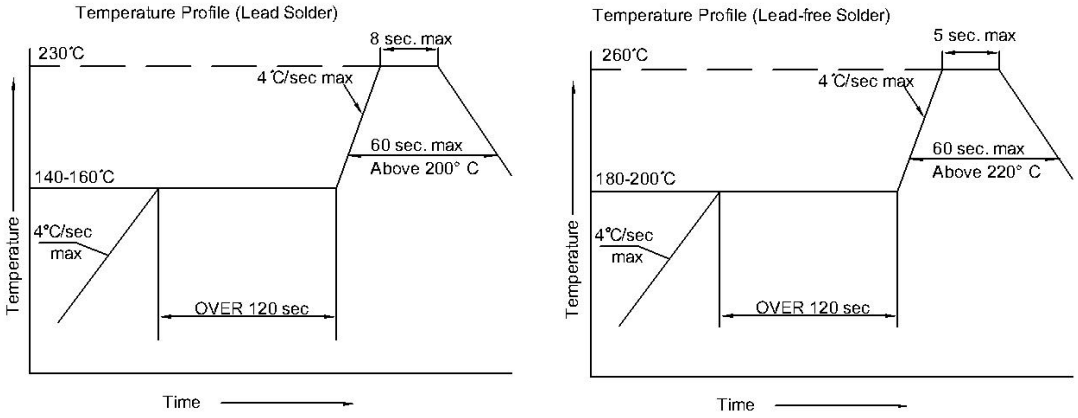


SPATIAL DISTRIBUTION

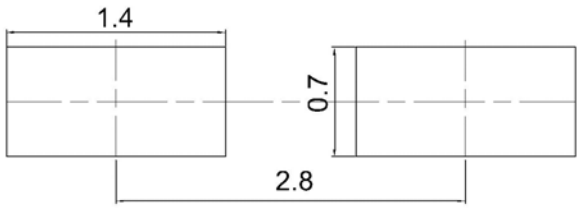
HL-AA-2810U3YC

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)