

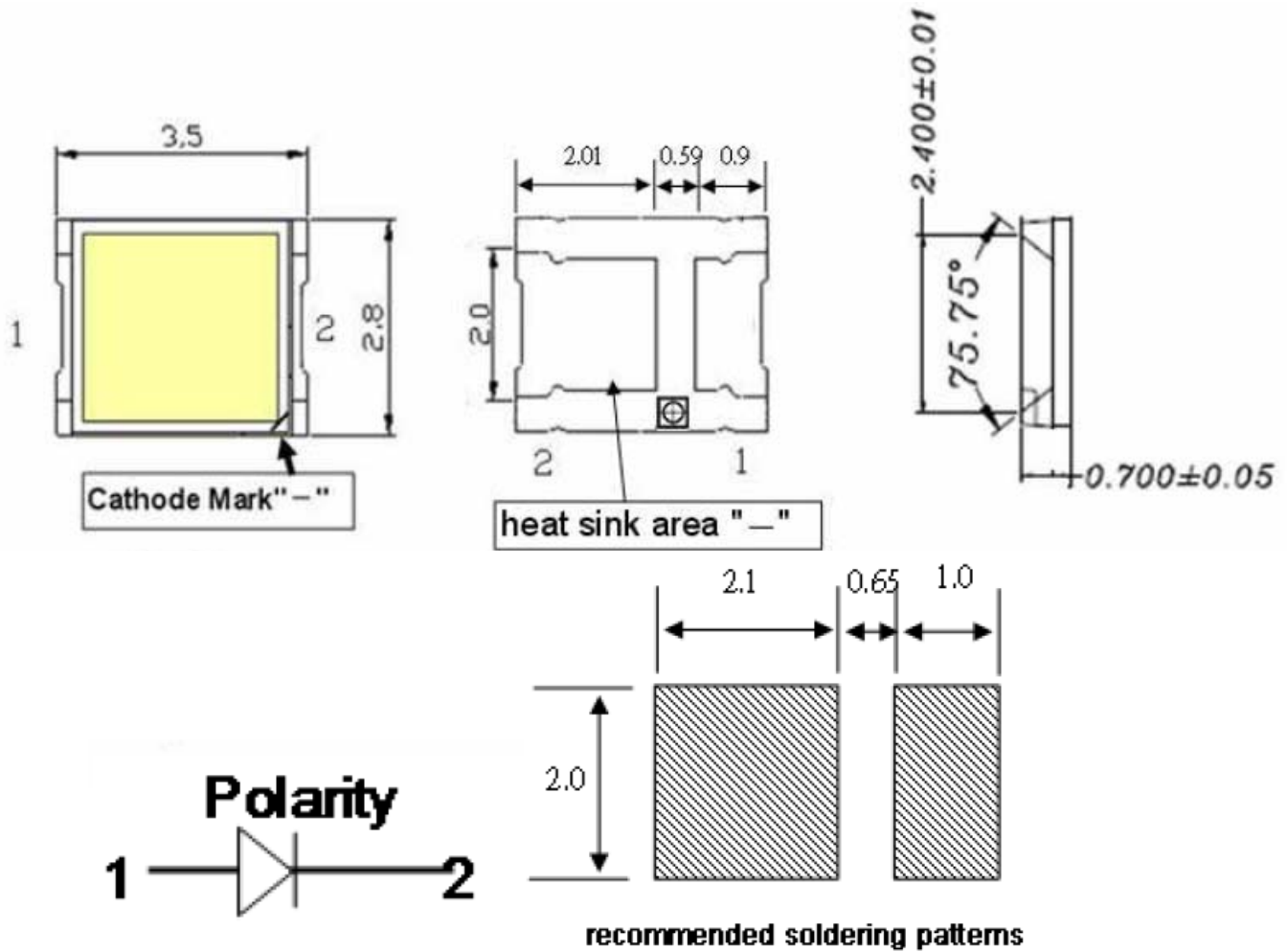


SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

Package Dimensions



Part NO.	Chip Material	Lens Color	Emission Color
SLM-2835NW40-B31-JZ	InGaN	Yellow Diffuse	White

Notes:

1. All dimensions are in millimeters.
2. Tolerance is ±0.25mm unless otherwise noted.
3. Specifications are subject to change without notice.



SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	510	mW
Peak Forward Current (Condition for IFP is pulse of 1/10 duty and 3 msec width.)	250	mA
Continuous Forward Current	150	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +100°C	

Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous flux	Φ_V	50	55		Lm	IF = 150mA
Color Temperature	CCT	5500	6000	6500	K	IF = 150mA
Viewing Angle	$2\theta_{1/2}$	/	120	/	deg	IF = 150mA
Wavelength	X	/	0.3215	/		IF = 150mA
	Y	/	0.3350	/		IF = 150mA
Forward Voltage	VF		3.2	3.4	V	IF = 150mA
Color Rendering Index (CRI)	Ra	80	/	/	/	IF = 150mA

Notes:

1. I_v : Tolerance for each Bin limit is $\pm 10\%$
2. λ_d : Tolerance for each Bin limit is $\pm 1\text{nm}$
3. Bin categories are established for classification of products.
Products may not be available in all bin categories.

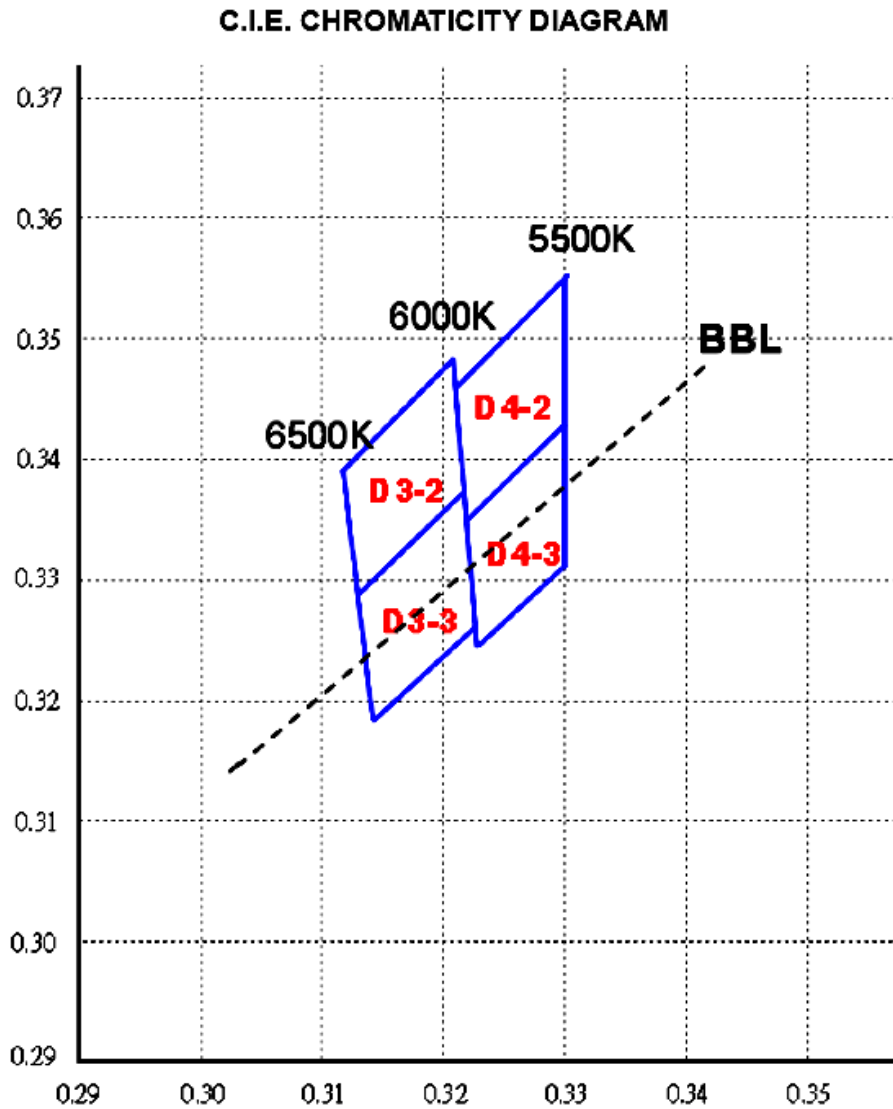


SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

Color Bin Limits(at 150mA)



BIN	X1	Y1	X2	Y2	X3	Y3	X4	Y4
D3-2	0.3130	0.3290	0.3115	0.3391	0.3205	0.3481	0.3213	0.3373
D3-3	0.3144	0.3186	0.3130	0.3290	0.3213	0.3373	0.3221	0.3261
D4-2	0.3215	0.3350	0.3207	0.3462	0.3300	0.3542	0.3300	0.3430
D4-3	0.3222	0.3243	0.3215	0.3350	0.3300	0.3430	0.3300	0.3310



SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

● Typical Electro-Optical Characteristics Curves

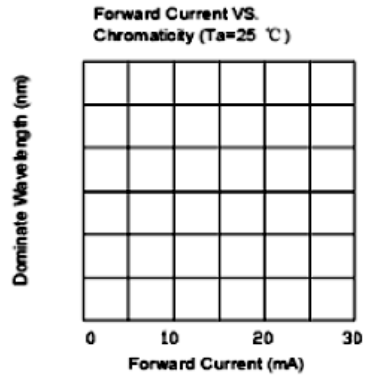
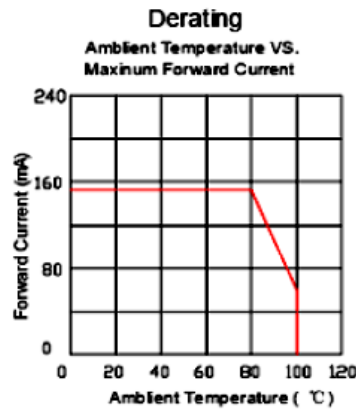
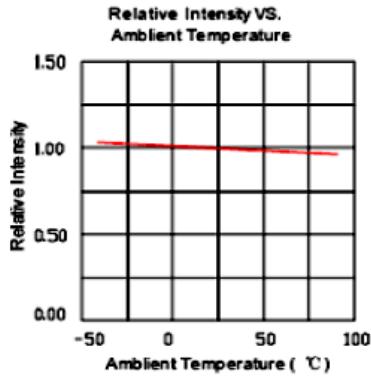
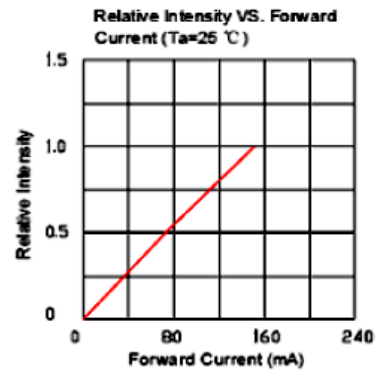
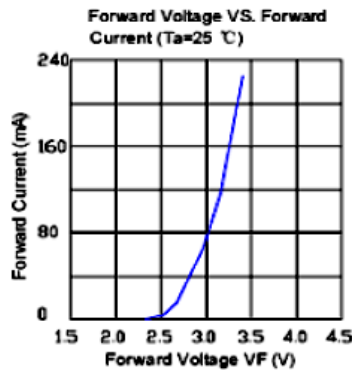
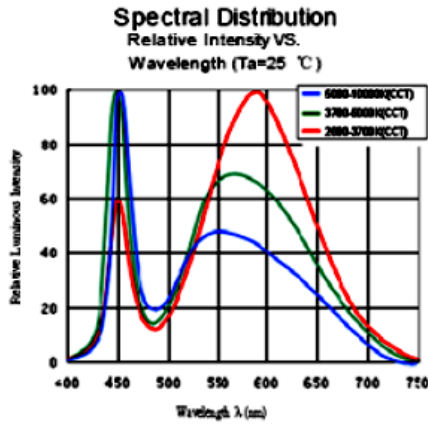
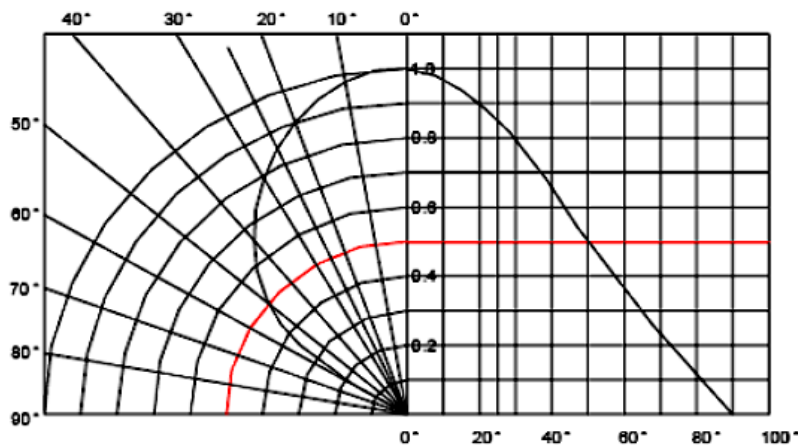


Diagram characteristics of radiation





SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

● Soldering

Manual Soldering (We do not recommend this method strongly) Soldering tin material : tin 6/4 alloy or contained Ag. To prevent cracking ,please bake before manual soldering.

Keep the temperature on the edge of iron at 300°C Max.(25W)and apply for 3 second. If the temperature become higher, apply in a shorter time (1sec).

In manual soldering, take care not to damage the package especially terminal or resin.(Do not give stress to the product when soldering)

Do not use again it you remove the soldered product. It is recommended using an iron with a temperature control.

Reflow Soldering

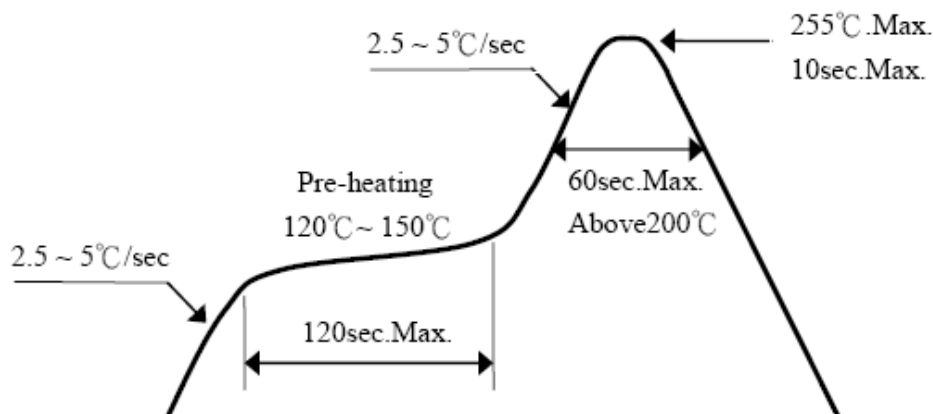
Recommend tin glue specifications:

Melting temperature: 150~255°C

Contains: Sn96.5%,Ag3.0%,Cu 0.5% JIS Z 3282 TEST

Never take next process until the component is cooled down to room temperature after reflow

The recommended reflow soldering profile(measuring on the surface of the LED resin) is following





SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

● Reliability Test Items And Conditions –

● Tests and Results

NO.	Test Item	Standard Test Method	Test Conditions	Test Duration	Failure Criteria #	Units Failed/Tested
1	Resistance to Soldering Heat (Reflow Soldering)	JEITA ED-4701 300 301	Tsld=260°C, 10sec,reflows Pretreatment30°C,70%,168hrs		#1	0/20
2	Solderability (Reflow Soldering)	JEITA ED-4701 300 303A	Tsld=245±5°C,5sec. Lead-free Solder(Sn-3.0Ag-0.5Cu)		#3	0/20
3	Thermal Shock	JEITA ED-4701 300 307	-40°C~110°C 1min dwell, 10sec transfer, Pretreatment:30°C,70%,168hrs	100cycles	#1	0/20
4	Temperature Cycle	JEITA ED-4701 100 105	-40°C (30min) ~25°C (5min) ~ 110°C (30min) ~25°C (5min)	100cycles	#1	0/20
5	High Temperature Storage	JEITA ED-4701 200 201	Ta=110°C	1000hrs.	#1	0/20
6	Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60°C, RH=90%	1000hrs.	#1	0/20
7	Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000hrs.	#1	0/20
8	Room Temperature Operating life		Ta=25°C, IF =150mA	1000 hrs.	#2	0/20
9	High Temperature Operating life		Ta=65°C, IF =150mA	1000hrs.	#2	0/20
10	Temperature Humidity Operating life		60°C, RH=90%, IF =150mA	1000hrs.	#2	0/20
11	Low Temperature Operating life		Ta=-40°C, IF=150mA	1000hrs.	#2	0/20

Note: Measurements are performed after allowing the LEDs to return to room temperature.

LISTER : 周素華 03-24-16

EDITOR : 03-24-16

DATE : 03-24-16

REV : A



SHARLIGHT ELECTRONICS CO., LTD.

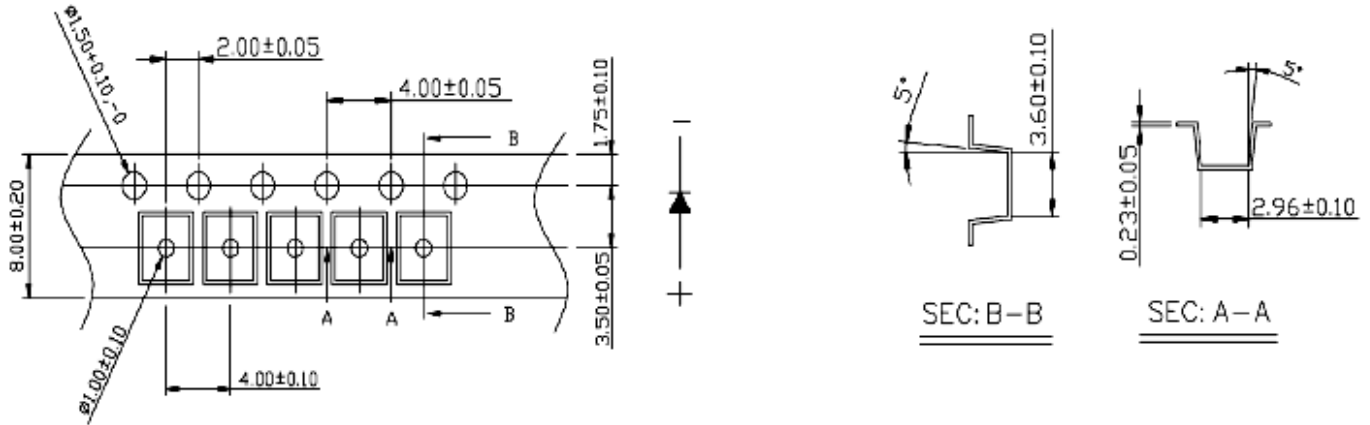
SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

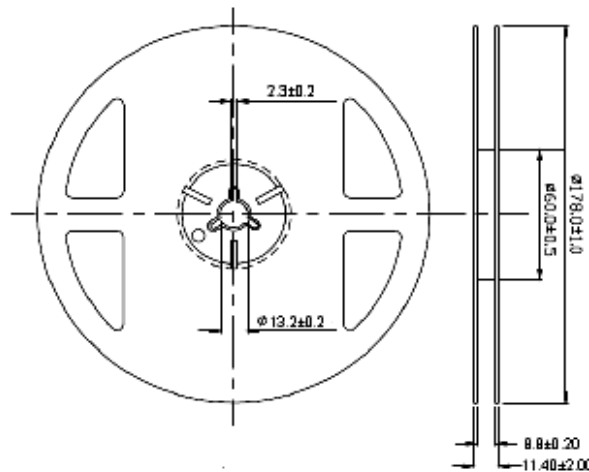
● Package

Unit: mm

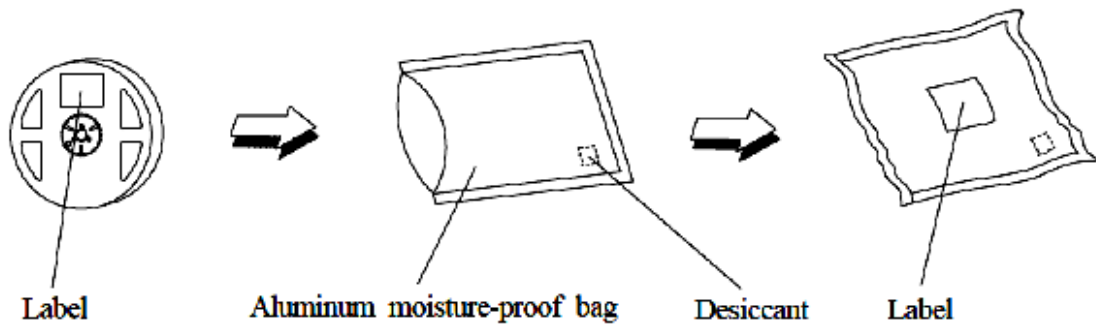
(1) Tape Specifications



(2) Reel Dimensions (Max. 4000 pcs/ reel)



(3) Moisture Resistant Packaging





SHARLIGHT ELECTRONICS CO., LTD.
SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NW40-B31-JZ(COOL WHITE)

※Note :

Recommended storage conditions :

1. Storage Condition:

- a. don't open the sealed bag until the Reflow Soldering ◦
- b. before open the sealed bag, please keep bag at Ambient Temperature from 5 to 25°C and Relative Humidity < 60% ◦
- c. storage life: within 6 months ◦

2. Once overdue the storage life or after open the sealed bag for 12 hours , the LED has to be oven at 70°C for 24 hours before the Reflow Soldering ◦

3. After oven the LED, the Reflow Soldering has to be completed within 12 hours. ◦

Otherwise, the oven LED has to be sealed in bag again and storage at Ambient Temperature of 23 +/- 5°C & RH 5~30% ◦