

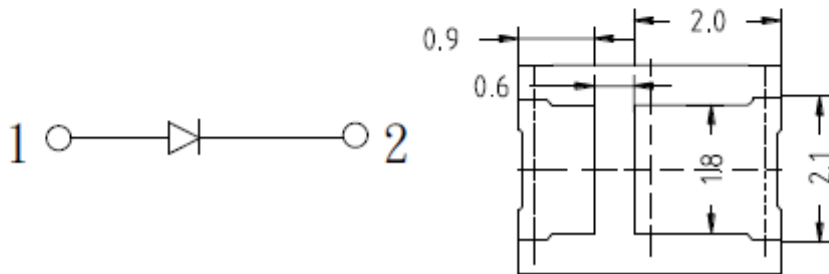
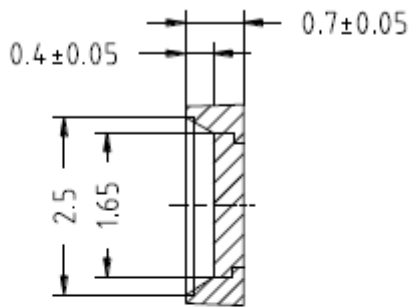
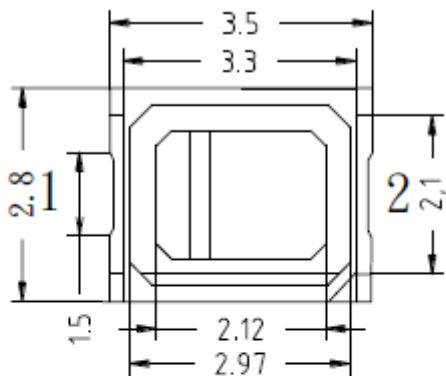


SHARLIGHT ELECTRONICS CO., LTD.

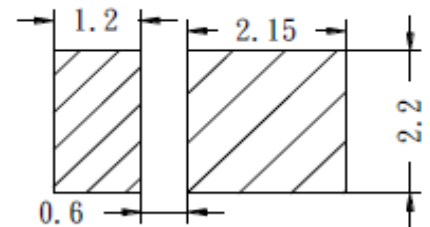
SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

Package Dimensions



RECOMMEND PADLAYOUT



| Part NO. | Chip Material | Lens Color | Emission Color |
|---------------------|---------------|------------|----------------|
| SLM-2835NY40-A31-EC | InGaN | - | Warm White |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}(.010\text{'})$ unless otherwise noted.
3. Specifications are subject to change without notice.



SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

Absolute Maximum Ratings at TA=25°C

| Parameter | Maximum Rating | Unit |
|-----------------------------|---------------------|------|
| Forward Current | 150 | mA |
| Power Dissipation | 510 | mW |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -40°C to + 80°C | |
| Storage Temperature Range | -40°C to + 100°C | |
| Soldering Temperature | 260°C for 5 Seconds | |

Electrical / Optical Characteristics at TA=25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-----------------------|--------|------|--------|------|------|----------------|
| Lumen | Φ | | 47 | | lm | IF =150mA |
| Wavelength | X | | 0.4467 | | | IF =150mA |
| | Y | | 0.4076 | | | |
| Viewing Angle | 2θ 1/2 | | 120 | | deg | IF =150mA |
| Forward Voltage | VF | | 3.2 | 3.4 | V | IF =150mA |
| Reverse Current | IR | | | 10 | μA | Vr = 5v |
| Color Rendering Index | CRI | | 80 | | % | IF =150mA |
| Color Temperature | CCT | | 2870 | | K | IF =150mA |

Range of bins

| Bin | B | C | D | E | F | G |
|--------|---------|---------|---------|---------|---------|---------|
| VF(V) | 2.8-2.9 | 2.9-3.0 | 3.0-3.1 | 3.1-3.2 | 3.2-3.3 | 3.3-3.4 |
| Bin | 23 | 24 | 25 | | | |
| LM(lm) | 40-45 | 45-50 | 50-55 | | | |
| WL | 7B1 | 7B2 | 8A1 | 8A2 | | |

LISTER: 王貴蘭 08-26-13

EDITOR: 周素華 08-26-13

DATE: 08-26-13

REV: A

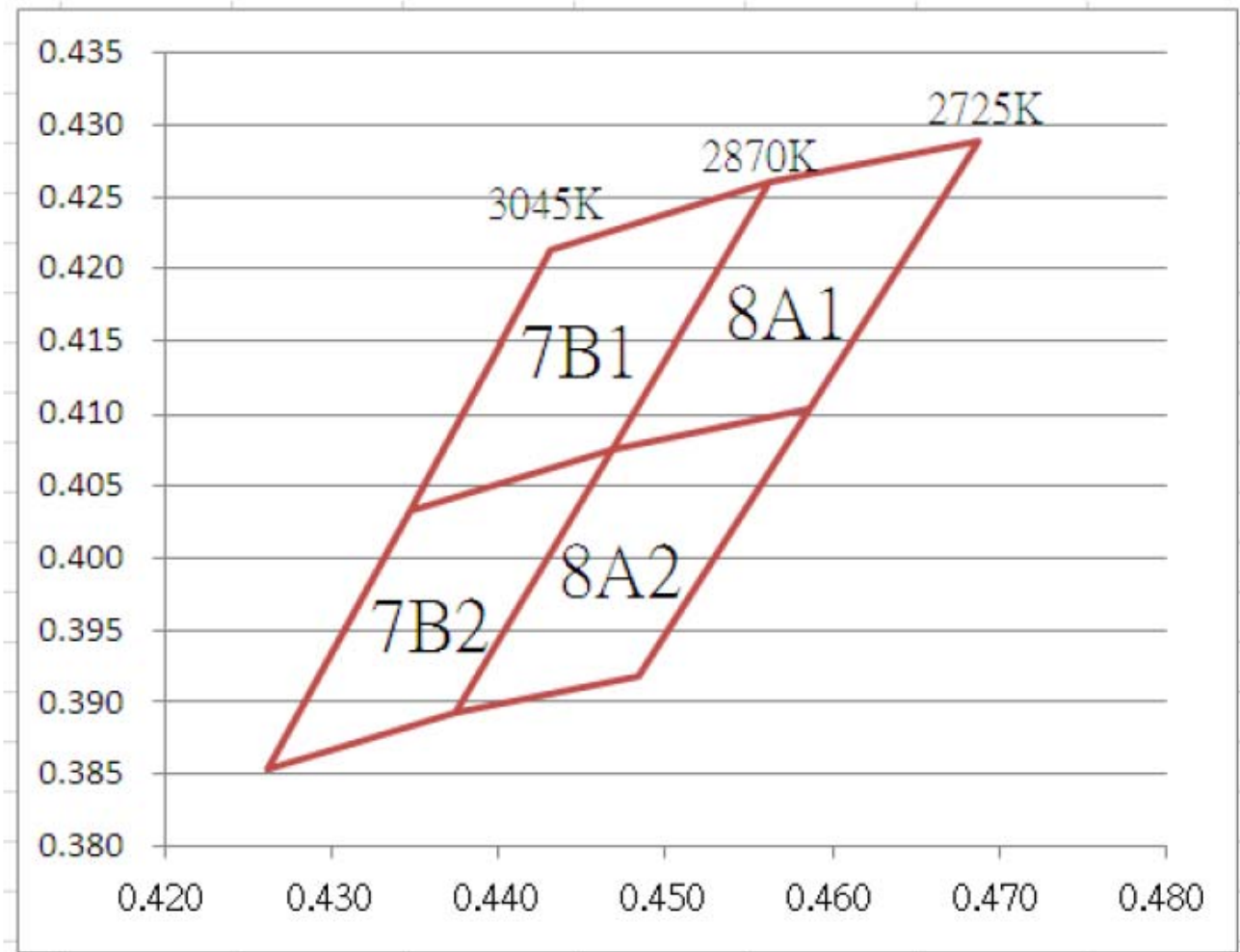


SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

■ Color Coordinate Comparison



| BIN | X | Y | X | Y | X | Y | X | Y |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 7B1 | 0.4562 | 0.4260 | 0.4430 | 0.4213 | 0.4345 | 0.4033 | 0.4467 | 0.4076 |
| 7B2 | 0.4467 | 0.4076 | 0.4345 | 0.4033 | 0.4260 | 0.3854 | 0.4373 | 0.3893 |
| 8A1 | 0.4687 | 0.4289 | 0.4562 | 0.4260 | 0.4467 | 0.4076 | 0.4585 | 0.4104 |
| 8A2 | 0.4585 | 0.4104 | 0.4467 | 0.4076 | 0.4373 | 0.3893 | 0.4483 | 0.3918 |

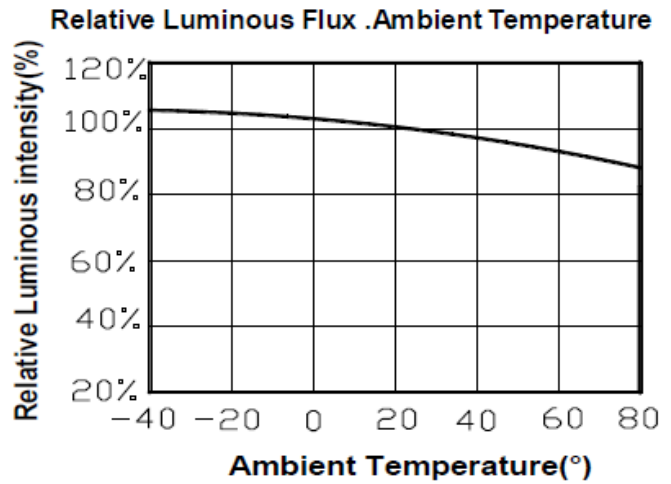
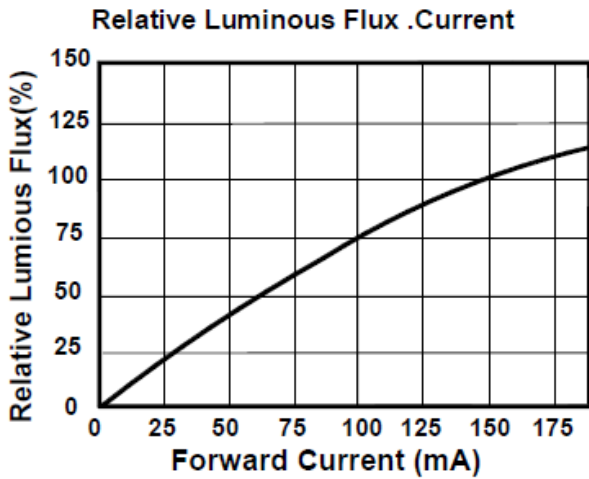
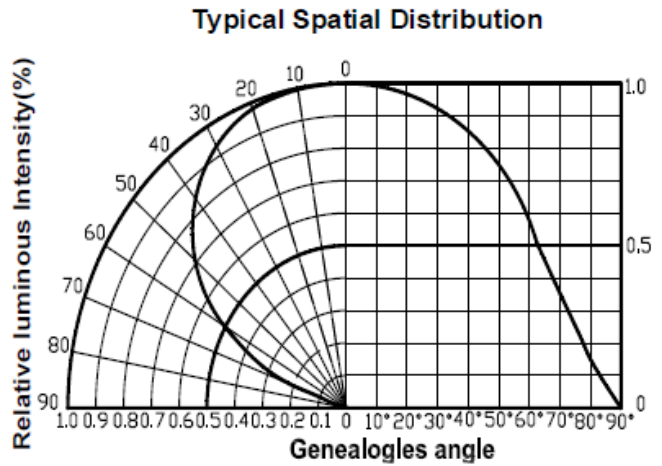
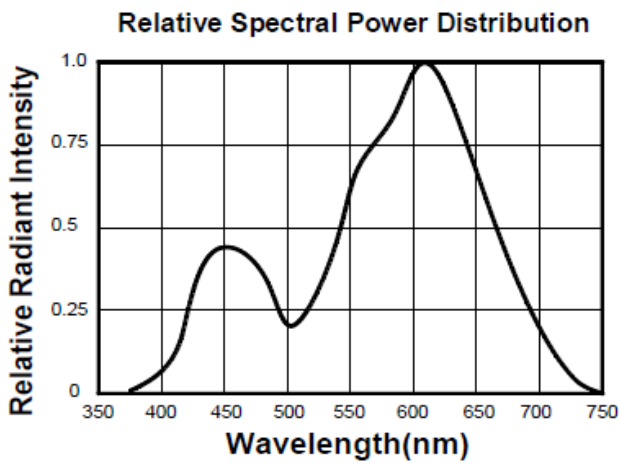


SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

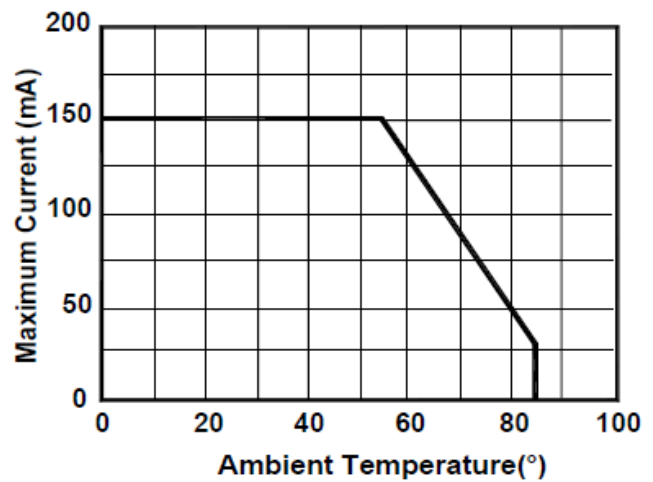
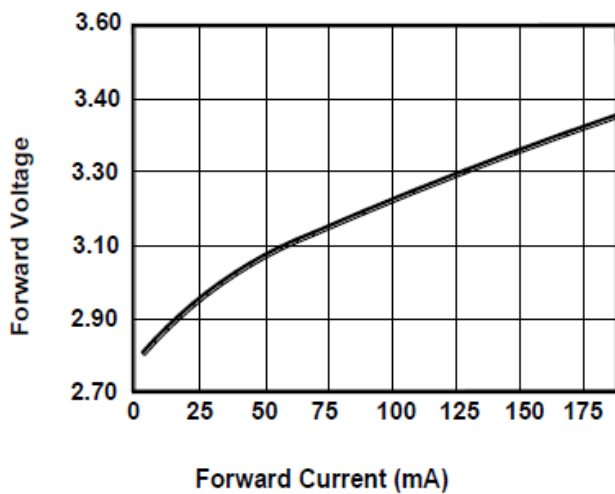
Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

■ Optical Characteristics-1



Electrical Characteristics

Thermal Design



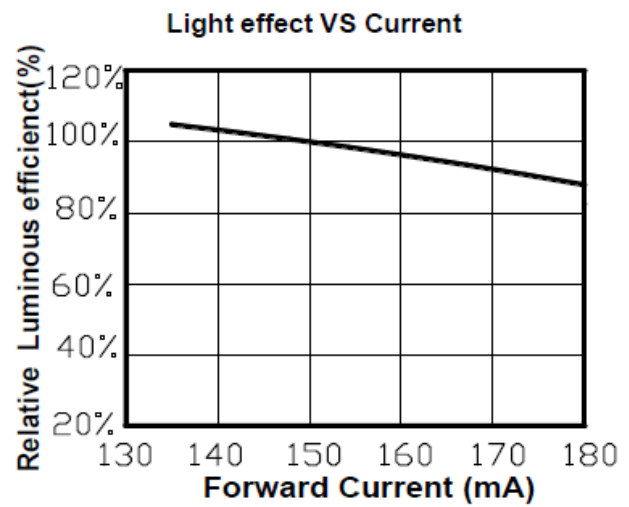
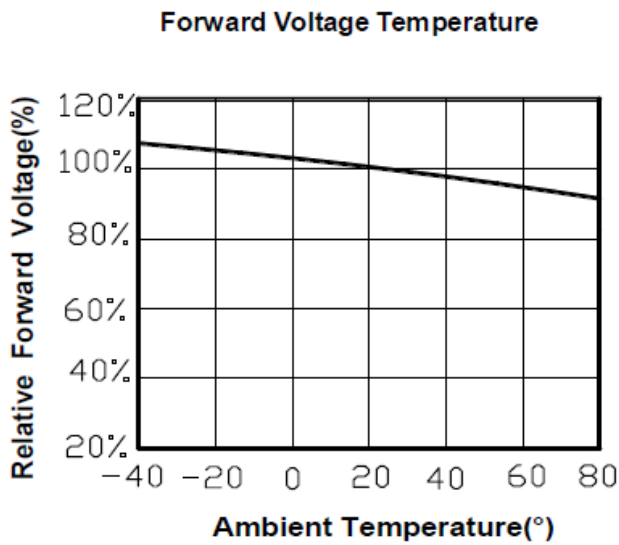


SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

Optical Characteristics-2



Test items and results of reliability

| Type | Test Item | Test Standard | Test Conditions | Note | Number of Damaged |
|------------------------|---------------------------------|-------------------------------------|--|-----------|-------------------|
| Environmental Sequence | Temperature Cycle | JEITA ED-4701 300 303 | -40°C 30min ↑↓5 min 100°C 30min | 100 cycle | 0/50 |
| | Thermal Shock | JEITA ED-4701 200 303 | -10°C 15min ↑↓5sec 100°C 15min | 20 cycle | 0/22 |
| | High Temperature Storage | JEITA ED-4701 200 201 | T _a =100°C | 1000 hrs | 0/22 |
| | Humidity Heat Storage | JEITA ED-4701 100 103 | T _a =60°C RH=90% | 1000 hrs | 0/22 |
| | Low Temperature Storage | JEITA ED-4701 200 202 | T _a =-40°C | 1000 hrs | 0/22 |
| Operation Sequence | Life Test | Tested with Brightek standard | T _a =25°C I _F =150mA | 1000 hrs | 0/22 |
| | High Humidity Heat Life Test | Tested with Brightek standard | 60°C RH=90% I _F =75mA | 500 hrs | 0/22 |
| | Low Temperature Life Test | Tested with Brightek standard | T _a =-30°C I _F =150mA | 1000 hrs | 0/22 |



SHARLIGHT ELECTRONICS CO., LTD.

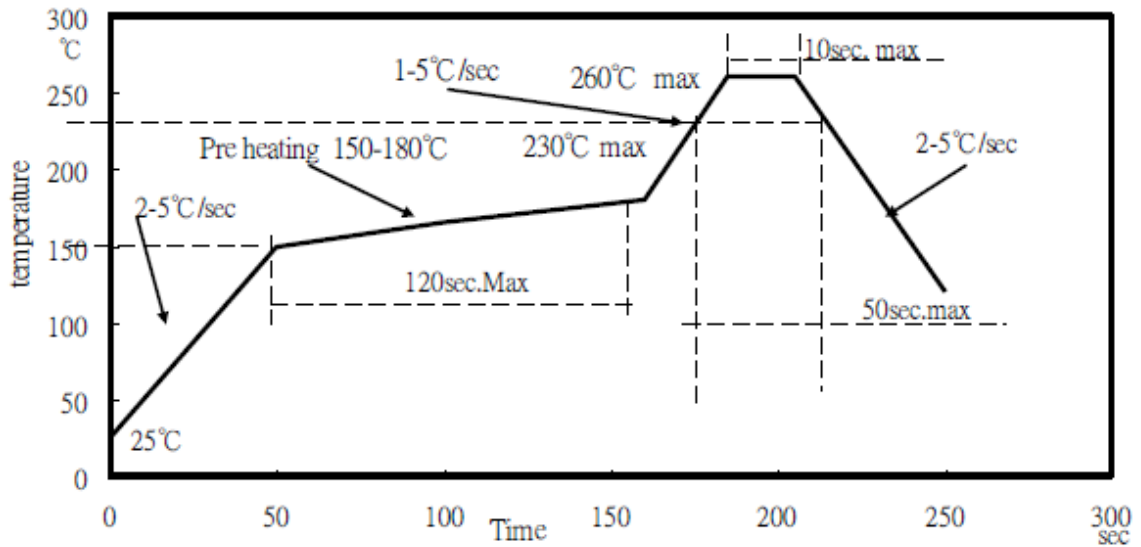
SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

Reflow Profile

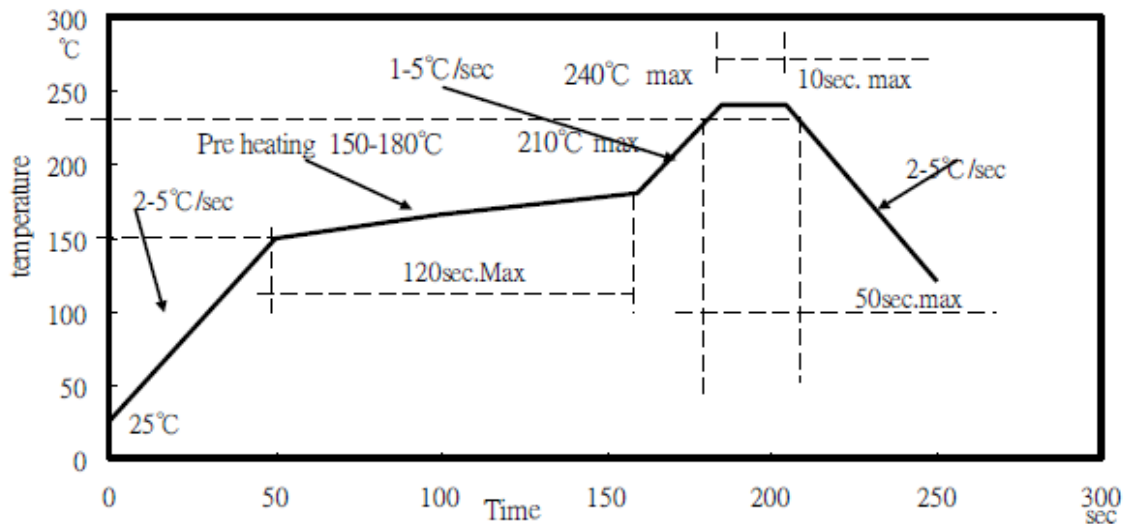
1. IR reflow soldering Profile

Lead Free solder



2. IR reflow soldering Profile

Lead solder



NOTES:

1. We recommend the reflow temperature 240°C (±5°C). the maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the silicone resin while it is exposed to high temperature.
3. Number of reflow process shall be 1 time.



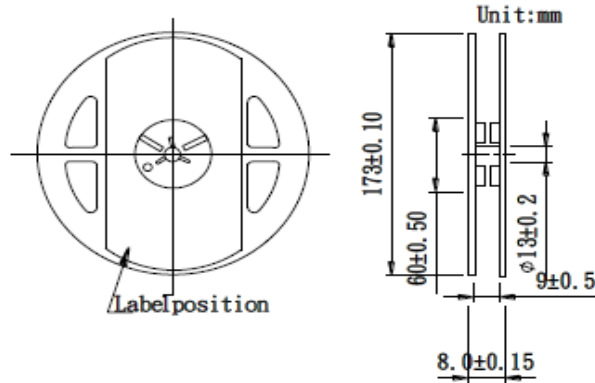
SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

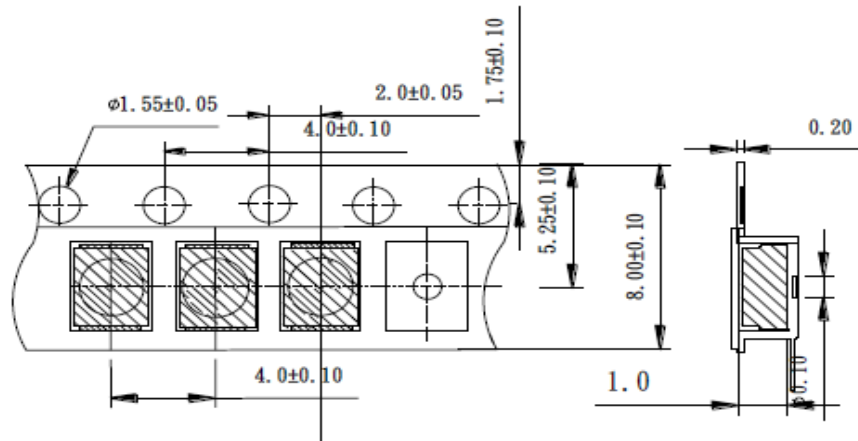
Part No. : SLM-2835NY40-A31-EC(WARM WHITE)

■ Packing

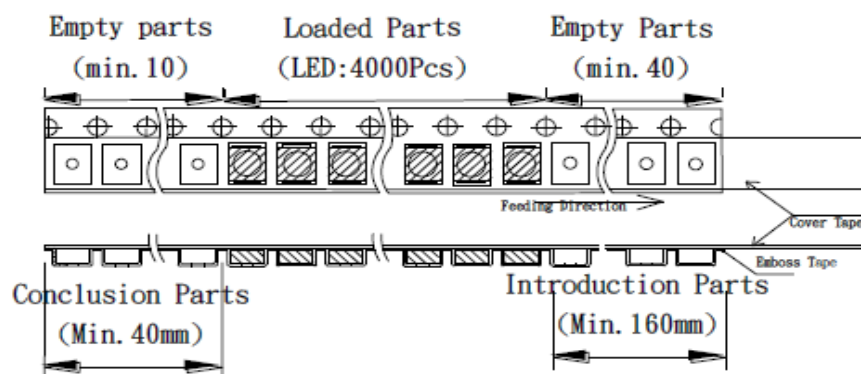
● Dimensions of Reel (Unit: mm)



● Dimensions of Tape (Unit: mm)



● Arrangement of Tape



NOTES

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing smd is two;
3. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications;
4. 4,000pcs/Reel



SHARLIGHT ELECTRONICS CO., LTD.
SPECIFICATION FOR APPROVAL

Part No. : SLM-2835NY40-A31-EC(WARM 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% ◦