

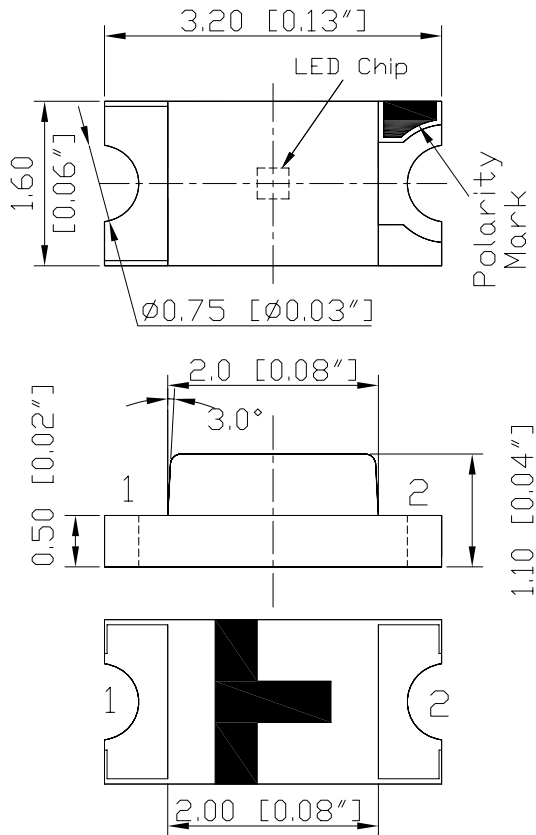


# SHARLIGHT ELECTRONICS CO., LTD.

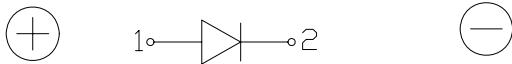
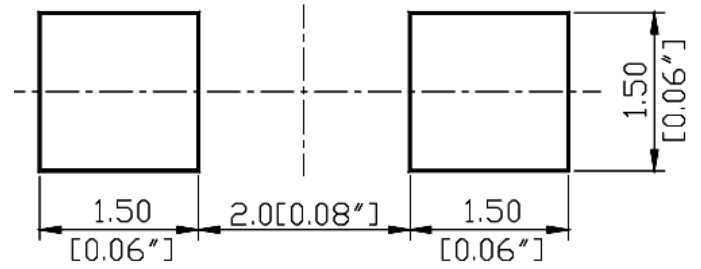
## SPECIFICATION FOR APPROVAL

**Part No. : SLM-1206UR40-GH-B**

### Package Dimensions



### RECOMMEND PAD LAYOUT



Part NO.	Chip Material	Lens Color	Emission Color
SLM-1206UR40-GH-B	AlGaInP	Water Clear	Red

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}(.010")$  unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



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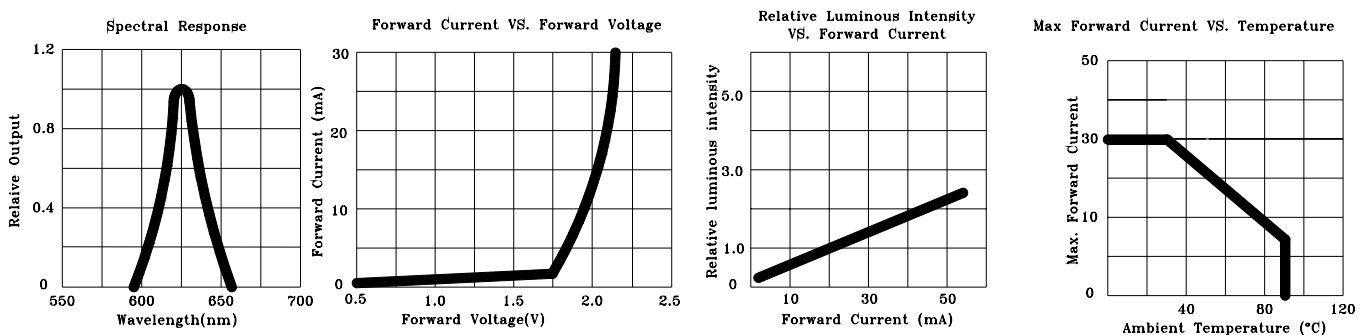
### Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	75	mW
Peak pulsing Current (1/8 Duty f=1kHz)	125	mA
Continuous Forward Current	30	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 80°C	
Storage Temperature Range	-40°C to + 85°C	
Soldering Temperature	260°C for 10 Sec	

### Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_V$	50	110		mcd	IF = 20mA
Viewing Angle	$2\theta_{1/2}$		140		deg	IF = 20mA
Peak Emission Wavelength	$\lambda_P$		640		nm	IF = 20mA
Dominant Wavelength	$\lambda_d$	625		635	nm	IF = 20mA
Spectral Line Half-Width	$\Delta\lambda$		17		nm	IF = 20mA
Forward Voltage	$V_F$	1.7		2.5	V	IF = 20mA
Reverse Current	IR			10	$\mu A$	VR=5V

### TYPICAL ELECTRON-OPTICAL CHARACTERISTIC CURVES 25°C Free Air Temperature Unless Otherwise Specified



LISTER : 曾聖文 04-25-11

EDITOR : 周素華 04-25-11

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<b>Forward Voltage Rank Combination (IF=20mA)</b>			
Rank	Min.	Max.	Unit
□	1.7	2.5	V
<b>Luminous Intensity Rank Combination (IF=20mA)</b>			
Rank	Min.	Max.	Unit
G	50	63	mcd
H	63	80	
I	80	100	
J	100	125	
K	125	160	
L	160	--	
<b>Dominant wavelength Rank Combination (IF=20mA)</b>			
Rank	Min.	Max.	Unit
u	625	630	nm
v	630	635	

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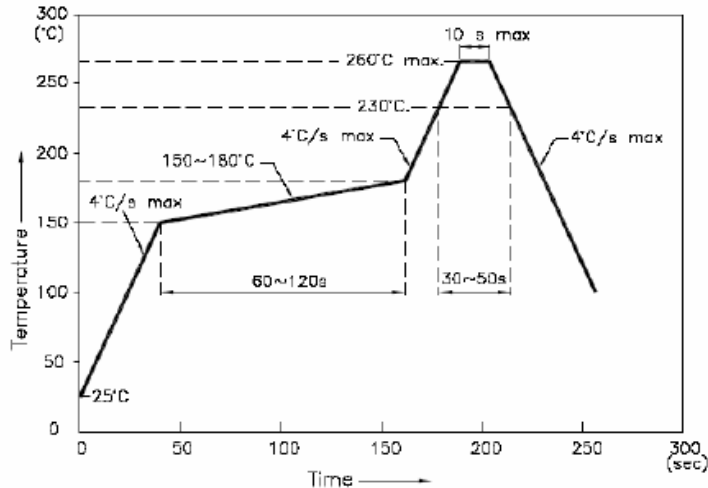
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## SPECIFICATION FOR APPROVAL

Part No. : SLM-1206UR40-GH-B

### Reflow Profile

#### ■ Reflow Temp/Time



#### NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$ . the maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

#### ■ Soldering iron

Basic spec is  $\leq 5\text{sec}$  when  $260^{\circ}\text{C}$ . If temperature is higher, time should be shorter ( $+10^{\circ}\text{C} \rightarrow -1\text{sec}$ ). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under  $230^{\circ}\text{C}$ .

#### ■ Rework

1. Customer must finish rework within 5 sec under  $260^{\circ}\text{C}$ .
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



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### Test items and results of reliability

Type	Test Item	Test Conditions	Note	Number of Damaged
Environmental Sequence	Temperature Cycle	-20°C 30min ↑ ↓ 80°C 30min	100 cycle	0/22
	Thermal Shock	-20°C 15min ↑ ↓ 80°C 15min	100 cycle	0/22
	High Humidity Heat Cycle	30°C ⇔ 65°C 90%RH 24hrs/1cycle	10 cycle	0/22
	High Temperature Storage	T <sub>a</sub> =80°C	1000 hrs	0/22
	Humidity Heat Storage	T <sub>a</sub> =60°C RH=90%	1000 hrs	0/22
	Low Temperature Storage	T <sub>a</sub> =-30°C	1000 hrs	0/22
Operation Sequence	Life Test	T <sub>a</sub> =25°C I <sub>F</sub> =20mA	1000 hrs	0/22
	High Humidity Heat Life Test	60°C RH=90% I <sub>F</sub> =10mA	500 hrs	0/22
	Low Temperature Life Test	T <sub>a</sub> =-20°C I <sub>F</sub> =20mA	1000 hrs	0/22

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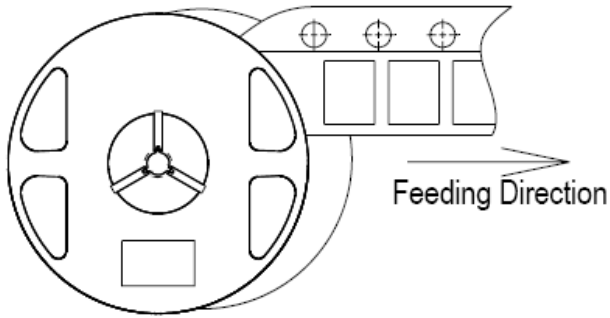
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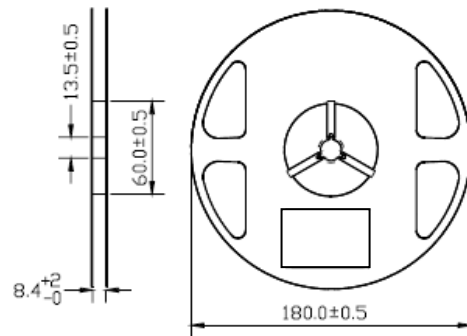
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### SMD Chip LED Lamps Packaging Specifications

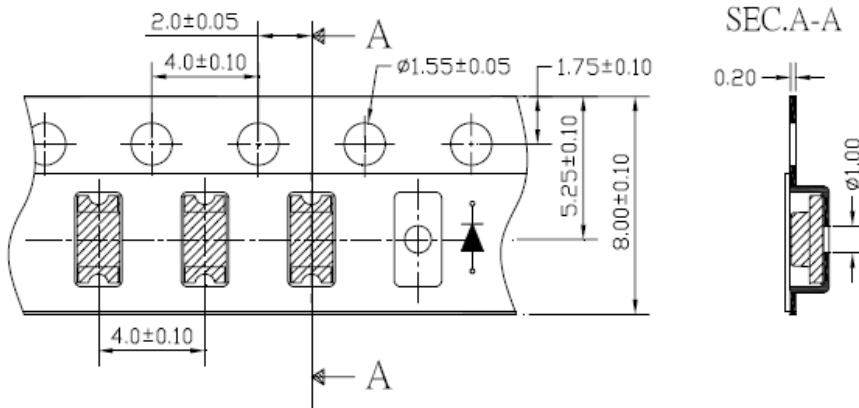
● Feeding Direction



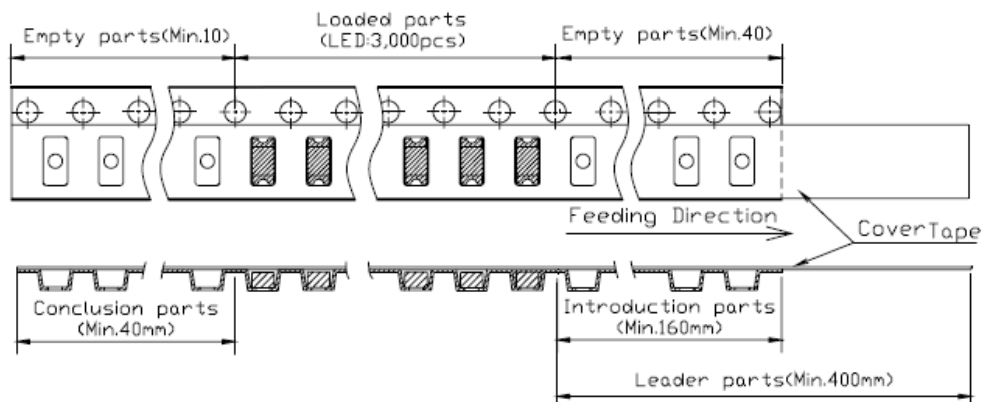
● Dimensions of Reel (Unit: mm)



● 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 lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000 pcs/Reel