

# **PRODUCT SPECIFICATION**



# Part No. : JH-3535V18S20-T8A-J285 High Power LED

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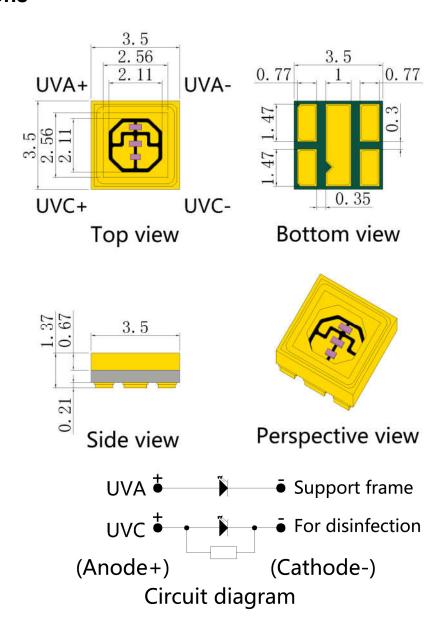


### 1.Product Features

- High Brightness Violet LED
   Round Package
- Viewing Angle 120 Degree
- Transparent Silicone

- Chip Material: AlGaInP
- RoHS Compliant

### 2.Dimensions



#### **Notes:**

- 1. All dimensions are in millimeters.
- 2. Tolerance is ±0.1mm unless otherwise noted.



# 3. Absolute Maximum Rating @ Ta=25° C

Parameter	Symbol	Maximum Rating	Unit
Continuous Forward Current	IF	40	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	60	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	0.2	W
Electrostatic Discharge	ESD	4000	V
Operating Temperature Range	TOPR	-25°C to +60°C	
Storage Temperature Range	TSTG	-35°C to +100°C	
Lead Soldering Temperature	TSOL	170°C	

# 4.光学特征 @ Ta=25°C /Optical Character @ Ta=25° C

Parameter	Symbol	Color	Min.	Тур.	Max.	Unit	Test Condition
Forward Voltage VF	\/E	UVC	5	6	7	V	I <sub>F</sub> =40mA
	VF	UVA	3.0	3.2	3.4	V	I <sub>F</sub> =40mA
Dower radiation	Power radiation Фе	UVC	2	4	5	mW	I <sub>F</sub> =40mA
Power radiation		UVA	20	30	40	mW	I <sub>F</sub> =40mA
Dominant Wayolongth	/avelength Wld	UVC	270	275	285	nm	I <sub>F</sub> =40mA
Dominant Wavelength		UVA	395	397.5	400	nm	I <sub>F</sub> =40mA
Reverse Current	IR		0		1	μΑ	V <sub>R</sub> =5V
Half wave width	HW		8		14	nm	I <sub>F</sub> =40mA
Viewing Angle	201/2				120	deg	I <sub>F</sub> =40mA
Recommend Forward  Current	IF(rec)				40	mA	

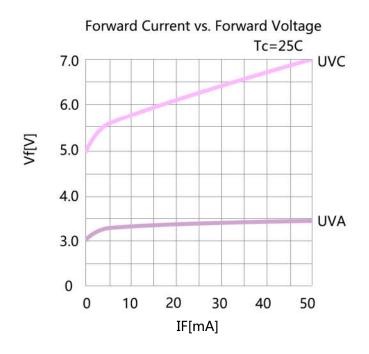
### **Notes:**

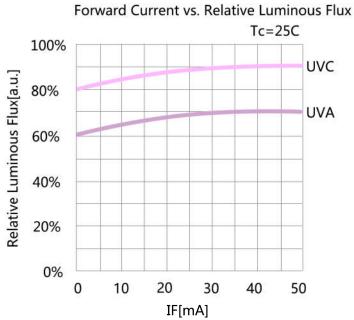
Measurement tolerance of forward voltage±0.1V

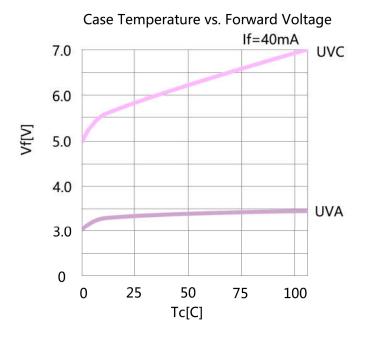


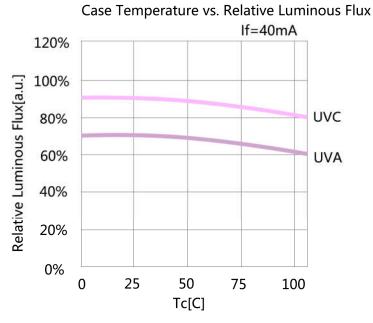
## **5.** Optical Character Curves

### ( 25 ° Ambient Temperature Unless Otherwise Noted )



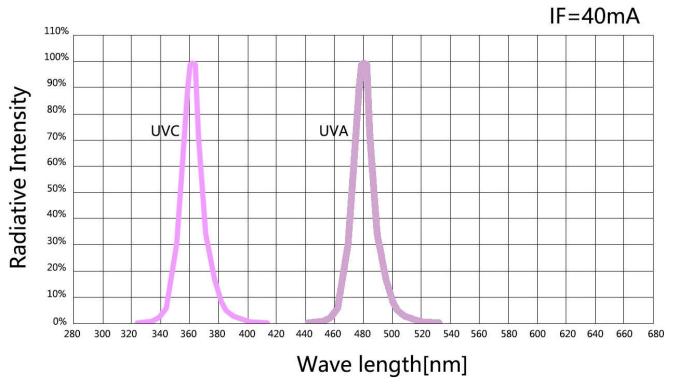




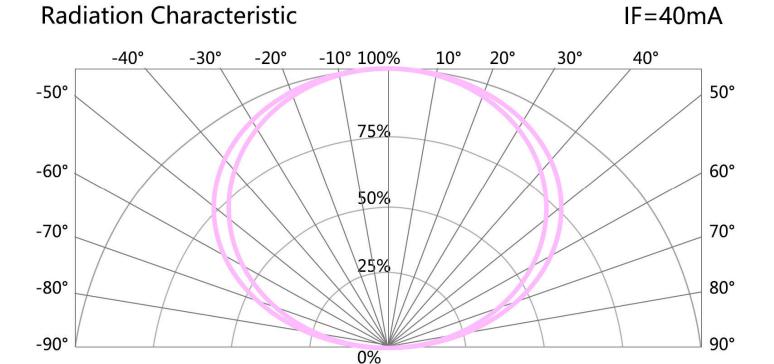




# **6.** Spectrum Curves



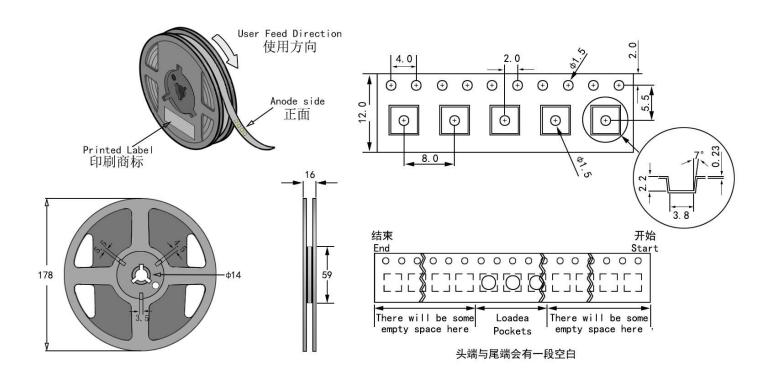
# 7. Viewing Angle Curves





### 8. Tape&Reel Packing

1. Recommend unpacked LED beads be welded within one day, if not, please vacuumize again and store in an environment of 20-35°C and 30-60% humidity. If can't vacuumize, please store LED beads in moisture proof box, control at  $25^{\circ}$ C + 3°C, humidity 50-60%. If unpacked above 1 week, bake at  $60\pm5^{\circ}$ C for 10-12 hours before weld.



#### **Notes:**

1. QTY: 1000pcs/Reel

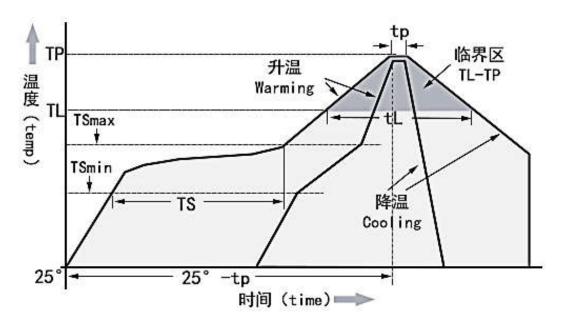
2. Tolerance ±0.2mm.

3. Package: P/N



## **9.**Soldering Advice

1. When soldering,don't touch the LED appearance gel during,this bad operation will destroy the LED.Moding LED usually use reflow soldering, please refer to the following reflow temperature curve, and recommend the user follow the soldering temperature curve of the solder paste.



Temperature Curve Character	Lead-free solder			
Average heating rate(TSmin to Tp)	最高 3℃/秒			
	Top 3 ℃ / s			
Preheating: Minimum temperature ( TSmin )	90℃			
Preheating: Maximum temperature ( TSmax)	200℃			
Preheating: Time ( TSmin to TSmax)	60-180 s			
Duration above temperature: Temperature TL	240℃			
Duration above temperature: Time tL	60-150 s			
Peak/classification temperature (Tp)	260℃			
Time within 5°C of actual peak temperature (tp)	20-40 s			
	最高 6℃/秒			
Cooling speed	The highest 6 ℃ / s			
T' / 1 1 / 1 / 2500	最多8分钟			
Time to reach peak temperature at 25°C	8 minutes Max			



### 10.Cautions

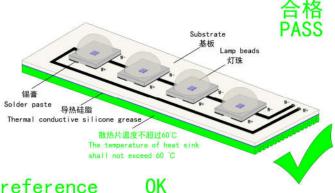
#### 1. Electrostatic Treatment

Do a full range of anti-static measures (such as: anti-static ring, anti-static clothes, machine, equipment grounding wire, etc.)



### 2. Heat Dissipation

- A. It is recommend to configure reasonable heat dissipation device for the product.
- The best working temperature range of the product is 40-60°. It is recommended to control the working temperature of the product within a reasonable range.



#### 3. Installation Conditions

reference



