

规 格 书  
SPECIFICATION

文件编号: YCS-QS-1-VCSEL-001  
NO. \_\_\_\_\_  
客户名称: \_\_\_\_\_  
Customer: \_\_\_\_\_  
版本: A1  
Version NO.: \_\_\_\_\_  
品 名: \_\_\_\_\_  
Description YCS-VVAC3535L120SI-R0  
规 格: \_\_\_\_\_  
Model: VCSEL 850nm 800mW  
送样日期: \_\_\_\_\_  
Day: \_\_\_\_\_

客户承认章/签 CUSTOMER APPROVED	核准 APPROVED	制定 ISSUED
	卢淑芬	张鹏

Address: 10 Floor, A1 Building, Sunshine Industrial Park, Hezhou, Xixiang,

Bao'an District, Shenzhen, China.

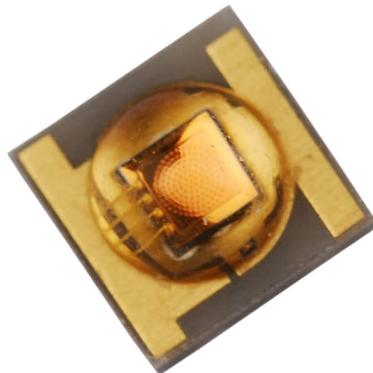
YCS-VVAC3535L120SI-R0

## Features

- High slope Efficiency and Reliability
- Light source with coherence and better penetrability

## Applications

- Laser Lighting
- Laser Sensors
- Interior automotive lighting



## Absolute Maximum Rating at Ta=25°C

Parameter	Symbol	Rating Max.	Unit
Forward Current	IF	1200	mA
Power Dissipation	PD	3.12	W
Operating Temperature Range	Topr	-20~+60	°C
Storage Temperature Range	Tstg	-40~+120	°C
Lead Soldering Temperature	Tsol	260 for 10sec	°C

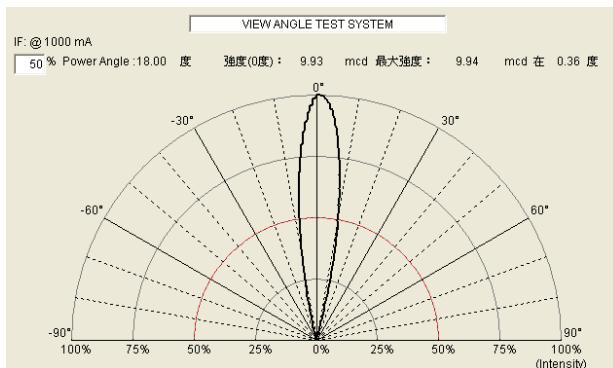
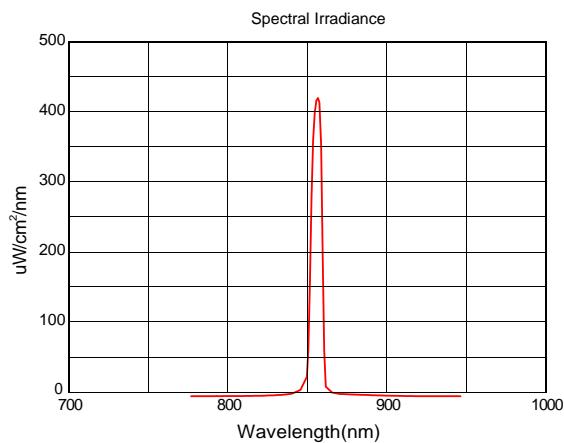
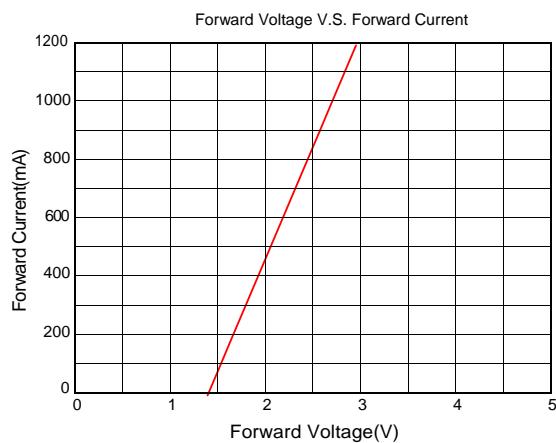
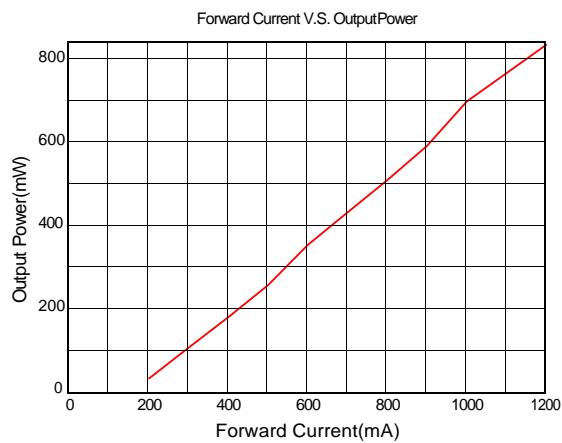
## Electrical /Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test
Forward Voltage	V <sub>f</sub>	--	2.4	2.6	V	I <sub>f</sub> = 1000mA
Output Power	P <sub>o</sub>	630	800	1000	mW	I <sub>f</sub> = 1000mA
Peak Wavelength	λ <sub>p</sub>	840	850	860	nm	I <sub>f</sub> = 1000mA
ESD	VESD	--	--	4000	V	HBM
Junction Temperature3	T <sub>j</sub>	--	--	120	°C	--
Thermal Resistance Junction / Solder Point	R <sub>th</sub>	--	4.5	--	°C/W	--

- Forward voltage (V<sub>f</sub>) measurement allowance is ±0.1V.
- Peak Wavelength (λ<sub>p</sub>) measurement allowance is ±1.5nm.
- Power (P<sub>o</sub>) measurement allowance is ± 10%.

YCS-VVAC3535L120SI-R0

## Characteristics Curves



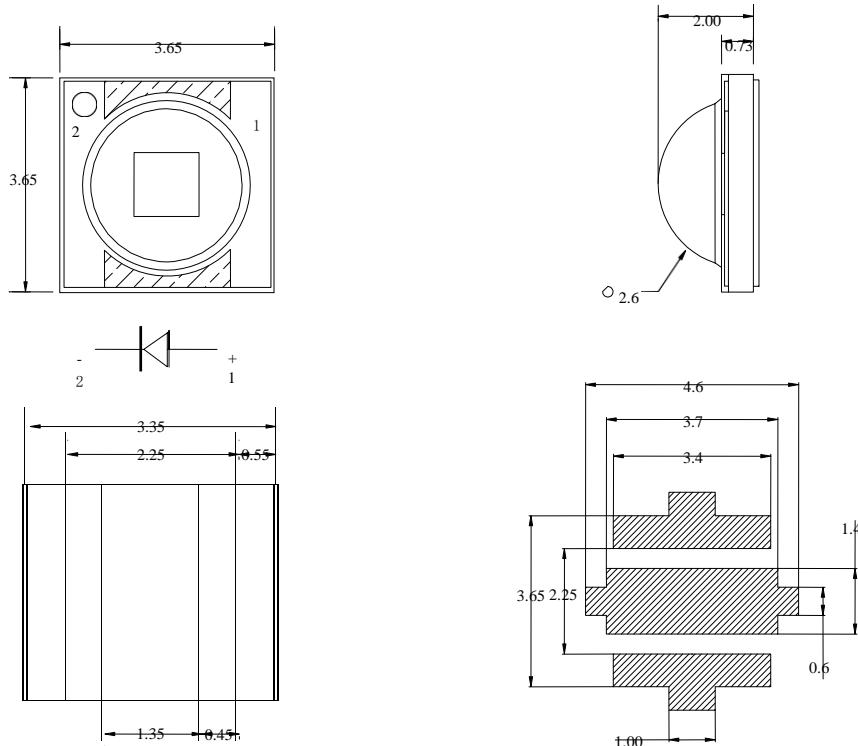
YCS-VVAC3535L120SI-R0

Test items and results of reliability

Type	Test Item	Test Conditions	Note	Number of Damaged
Operation Sequence	Life Test	T <sub>a</sub> =25°C I <sub>F</sub> =1000mA	1000 hrs	0/22
	High Temperature Life Test	T <sub>a</sub> =60°C I <sub>F</sub> =1000mA	1000 hrs	0/22
Environmental Sequence	Temperature Cycle	-45°C 30min ↑↓20 min 105°C 30min	50 cycle	0/22
	Thermal Shock	-10°C 15min ↑↓5sec 100°C 15min	50 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> =100°C	1000 hrs	0/22
	Humidity Heat Storage	T <sub>a</sub> =85°C RH=85%	1000 hrs	0/22
	Low Temperature Storage	T <sub>a</sub> =-40°C	1000 hrs	0/22

YCS-VVAC3535L120SI-R0

Package Dimensions(Unit : mm)

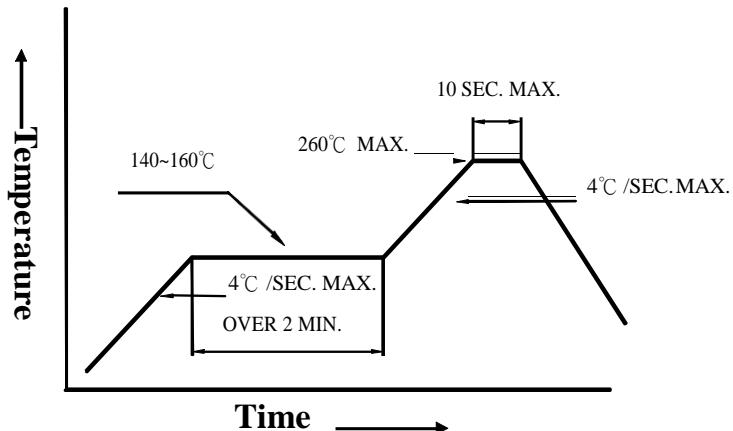


NOTES :

- All dimensions are in millimeters.
- Tolerance is  $\pm 0.1\text{mm}$  unless otherwise specified.
- Specifications are subject to change without notice.

YCS-VVAC3535L120SI-R0

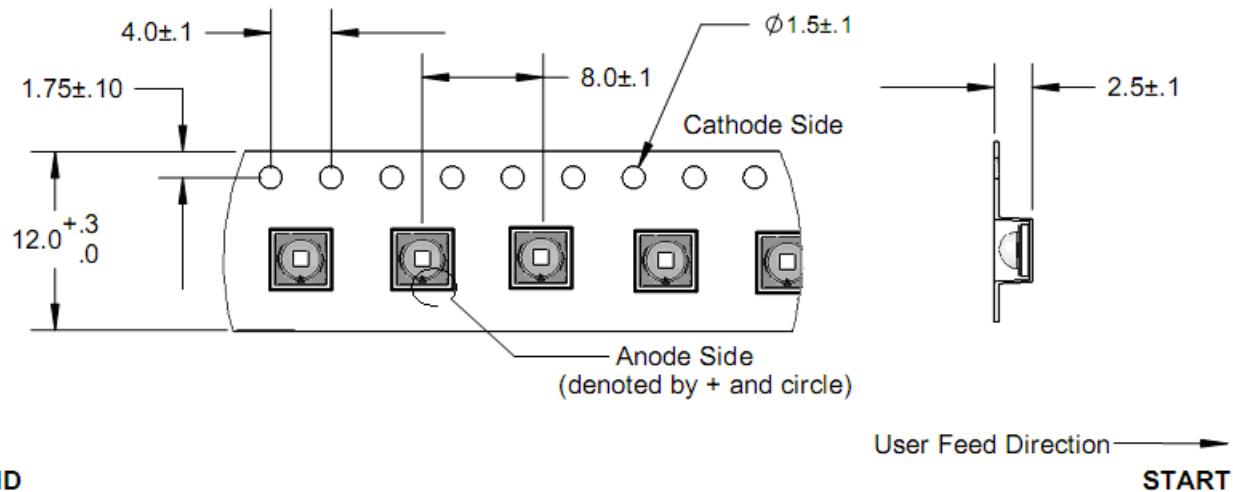
### Solder Reflow Process Parameters



NOTES :

- Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process,
- When soldering , do not put stress on the package during heating.

### Tapping and packaging specifications (Units: mm)



END

START