

# SMCC365-1100-04

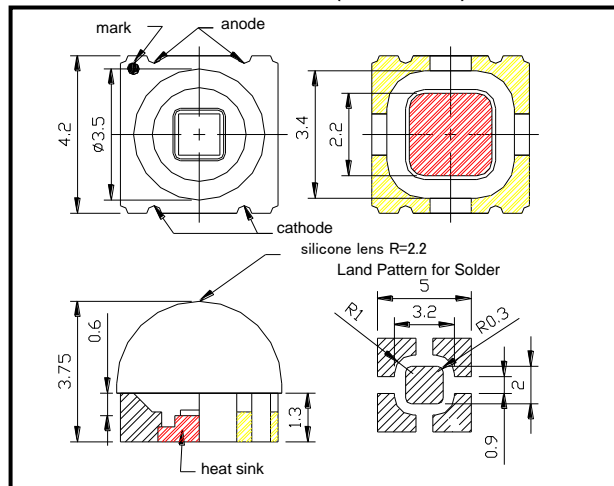
High power UV LED in ceramics SMD

SMCC365-1100-04 is an AlGaIn LED mounted on ceramic package with copper heat sink and is covered with silicone resin lens. On forward bias, it emits a band of 365nm. It is 35mW/sr typical of Radiant Intensity and  $\pm 35^\circ$  of viewing half angle.

◆ Specifications

- 1) Product Name            Ceramics SMD UV LED
- 2) Type No.                SMCC365-1100-04
- 3) Chip
- (1) Chip Material        AlGaIn
- (2) Chip Dimension    1000um\*1000um
- (3) Peak Wavelength    365nm typ.
- 4) Package
- (1) Type                    Ceramic with Heat sink
- (2) Lens                     Silicone Resin

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	2500	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	500	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	700	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	10	V	T <sub>a</sub> =25°C
Junction Temperature	T <sub>J</sub>	140	°C	
Thermal Resistance	R <sub>thja</sub>	6	K/W	
Operating Temperature	TOPR	-30 ~ +130	°C	
Storage Temperature	TSTG	-30 ~ +150	°C	
Soldering Temperature	TSOL	265	°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction – mounted on metal block

◆ Electro-Optical Characteristics [T<sub>a</sub>=25°C]

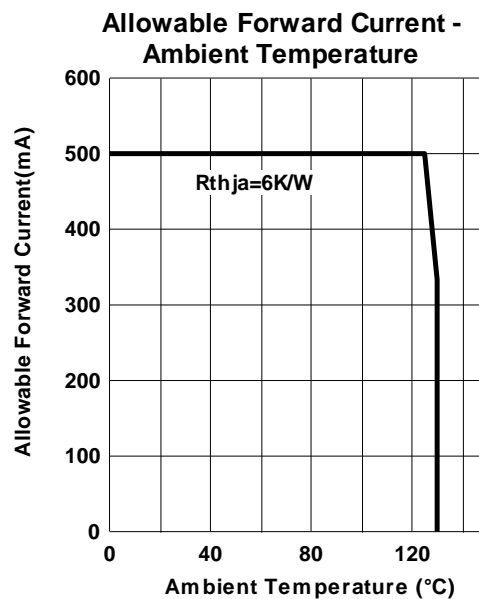
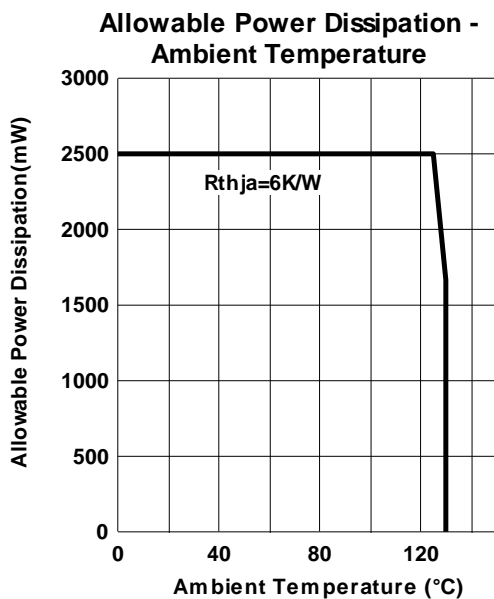
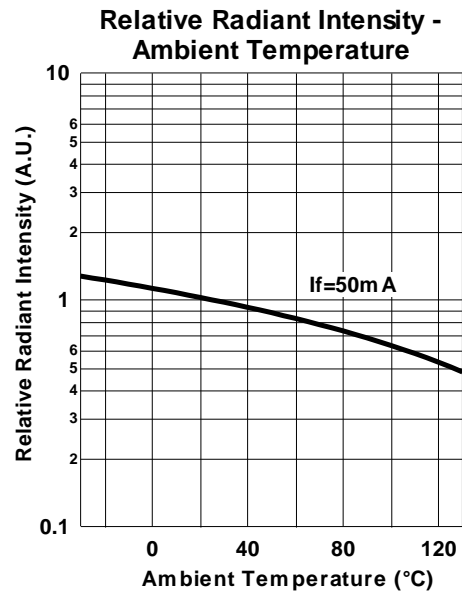
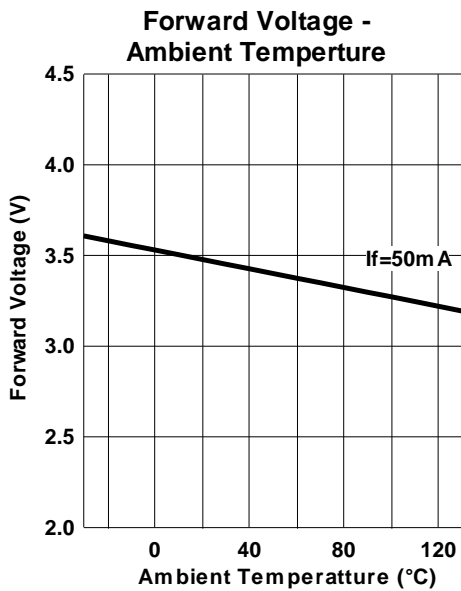
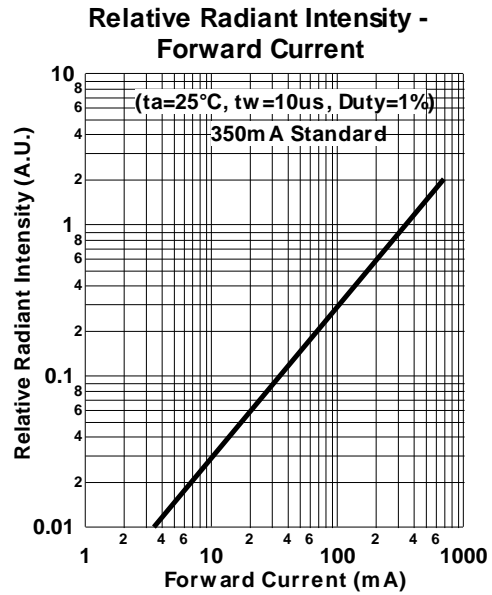
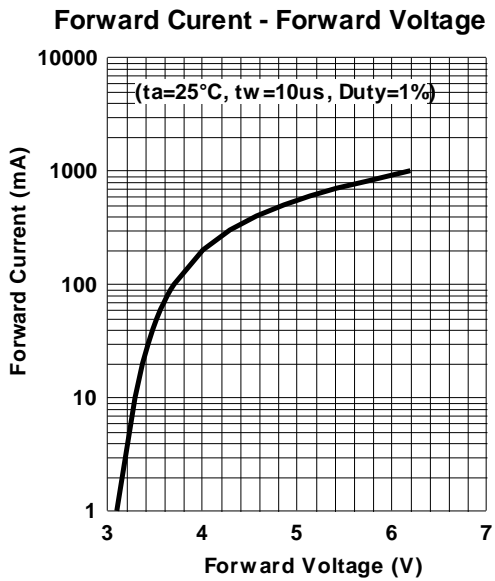
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =350mA		4.2	5.0	V
Pulsed Forward Voltage	V <sub>F</sub>	I <sub>FP</sub> =0.7A		5.4	6.0	V
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =350mA		50		mW
Radiant Intensity	I <sub>e</sub>	I <sub>F</sub> =350mA		10		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	360	365	370	nm
Half Width	Δλ	I <sub>F</sub> =50mA		16		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±35		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		200		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		150		ns

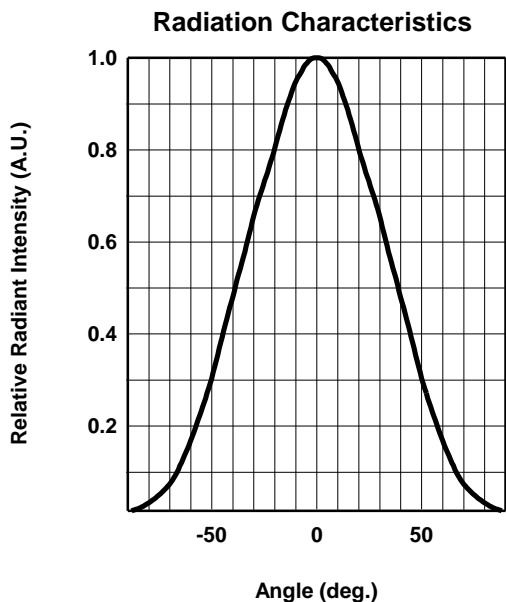
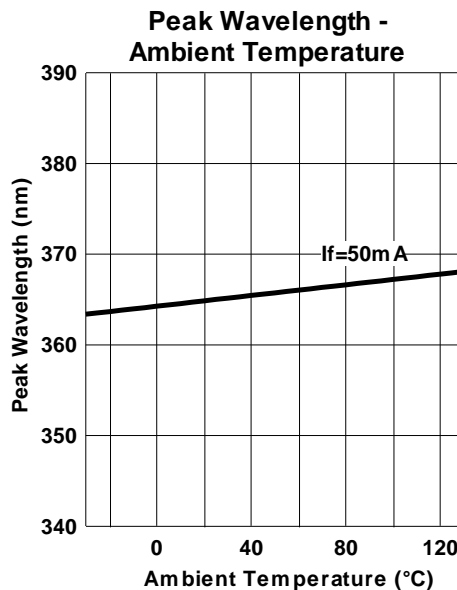
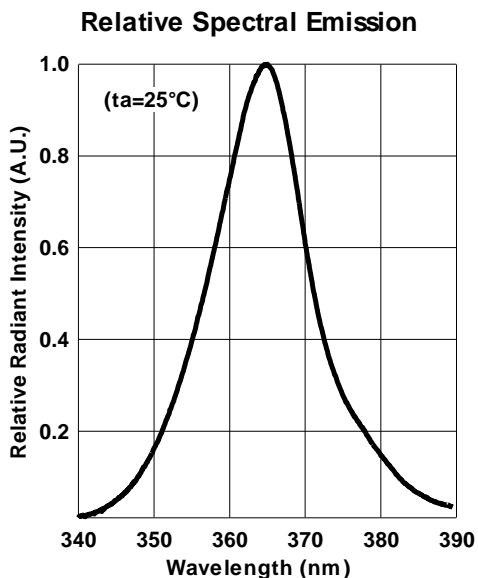
‡Radiated Power is measured by S3584-08.

‡Radiated intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741

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## SMD LED STORAGE AND HANDLING PRECAUTIONS

### < Storage Conditions before Opening a Moisture-Barrier Aluminum Bag >

- Before opening a moisture-barrier aluminum bag, please store it at <30°C, <60%RH. Please note that the maximum shelf life is 12 months under these conditions.

### < Storage Conditions after Opening a Moisture-Barrier Aluminum Bag >

- After opening a moisture-barrier aluminum bag, store the aluminum bag and silica gel in a desiccator.
- After opening the bag, please solder the LEDs within 48 hours in a room with 5 - 30°C, <50%RH.
- Please put any unused, remaining LEDs and silica gel back in the same aluminum bag and then vacuum-seal the bag.
- It is recommended to keep the re-sealed bag in a desiccator at <30%RH.

### < Notes about Re-sealing a Moisture-Barrier Aluminum Bag >

- When vacuum-sealing an opened aluminum bag, if you find the moisture-indicator of the silica gel has changed to pink from blue (indicating a relative humidity of 30 % or more), please do not use the unused LEDs, the aluminum bag, or the silica gel.

### < Notes about Opening a Re-sealed Moisture-Barrier Aluminum Bag >

- When opening a vacuumed and re-sealed aluminum bag in order to use the remaining LEDs stored in the bag, if you find that the moisture-indicator of the silica has changed to pink, please do not use the LEDs.

※The 48-hour- long floor life does not include the time while LEDs are stored in the moisture-barrier aluminum bag.

However, we strongly recommend to solder the LEDs as soon as possible after opening the aluminum bag.

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