

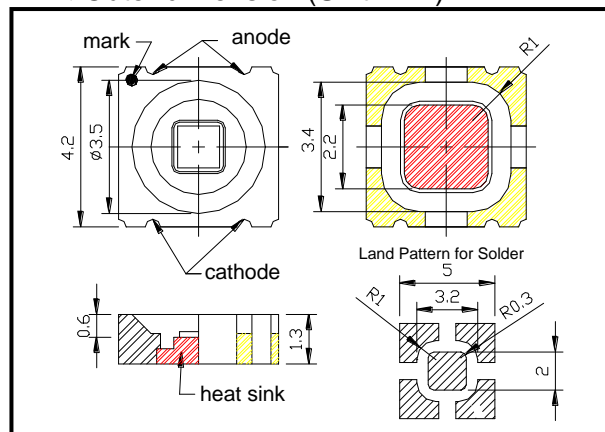
SMCC365-1100 High power UV LED in ceramics SMD

SMCC365-1100 is an AlGaIn LED mounted on ceramic package with copper heat sink and is covered with silicone resin. On forward bias, it emits a band of 365nm. It is 50mW typical of output power and $\pm 60^\circ$ of viewing half angle.

◆ Specifications

- 1) Product Name Ceramics SMD UV LED
- 2) Type No. SMCC365-1100
- 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) Resin Material Silicone Resin

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	2500	mW	Ta=25°C
Forward Current	IF	500	mA	Ta=25°C
Pulse Forward Current	IFP	700	mA	Ta=25°C
Reverse Voltage	VR	10	V	Ta=25°C
Junction Temperature	TJ	140	°C	
Thermal Resistance	Rthja	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

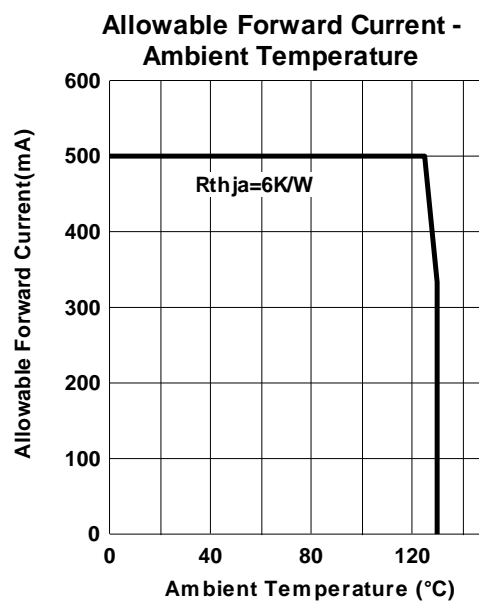
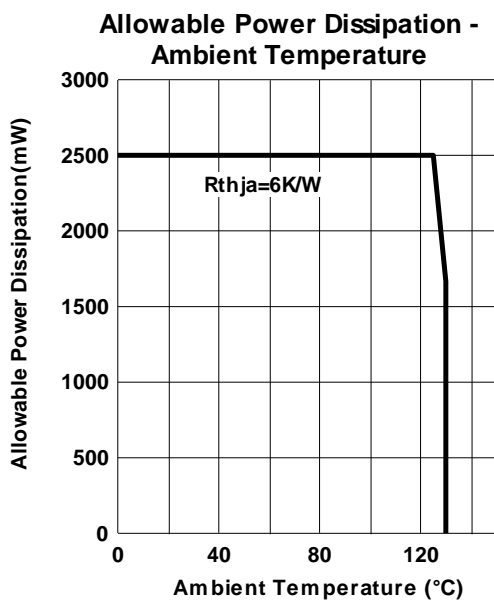
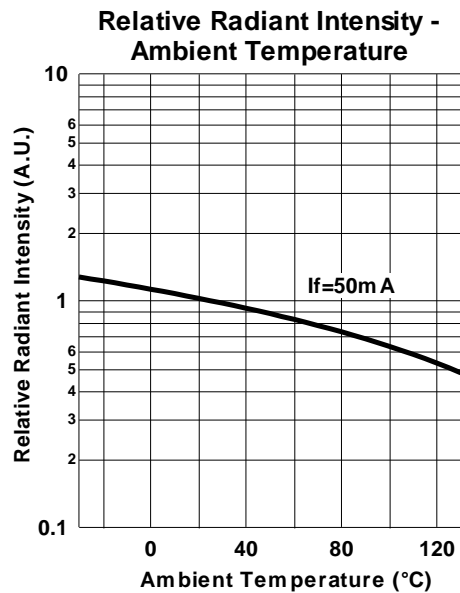
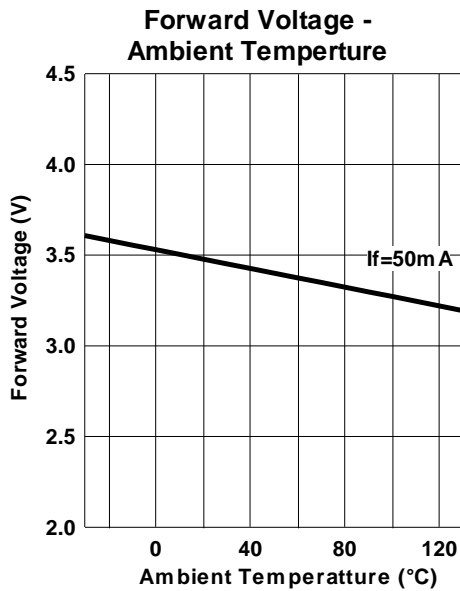
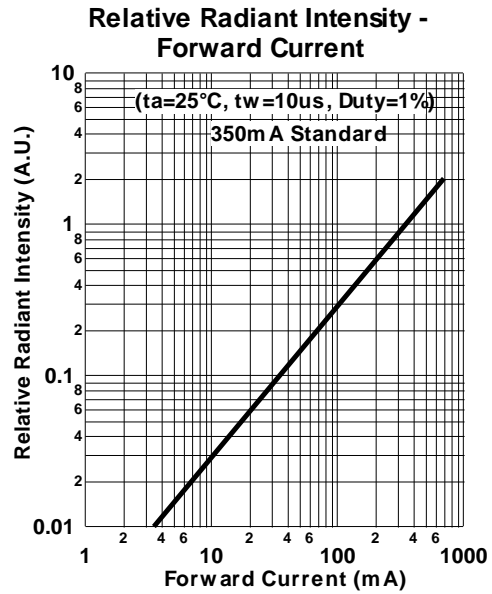
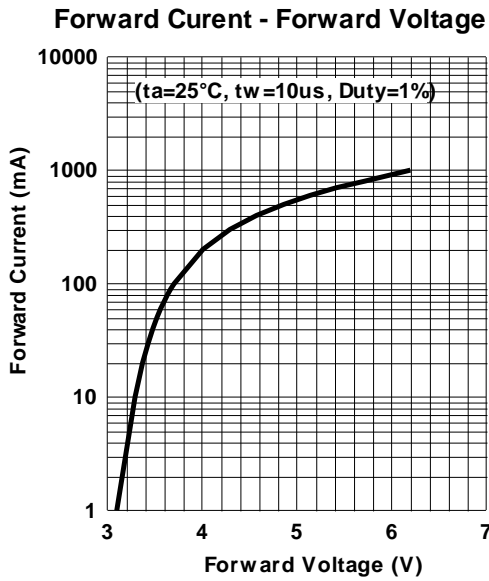
‡Thermal resistance: junction – mounted on metal block

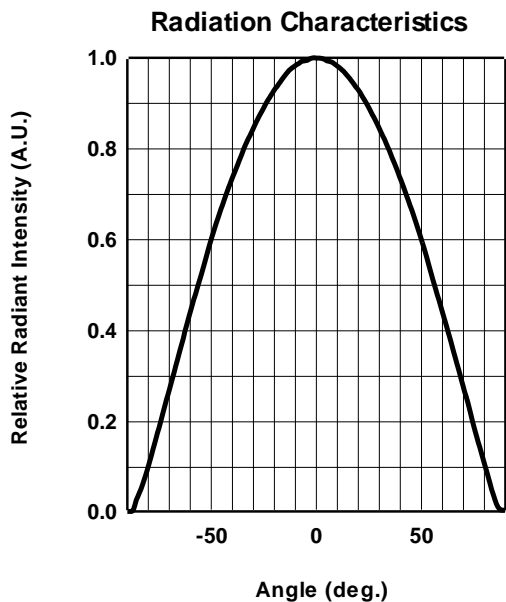
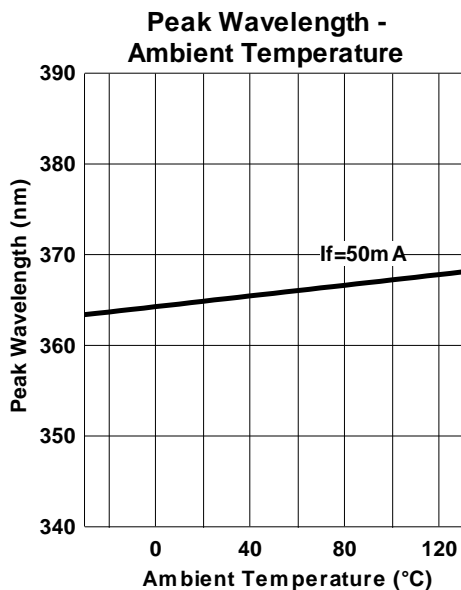
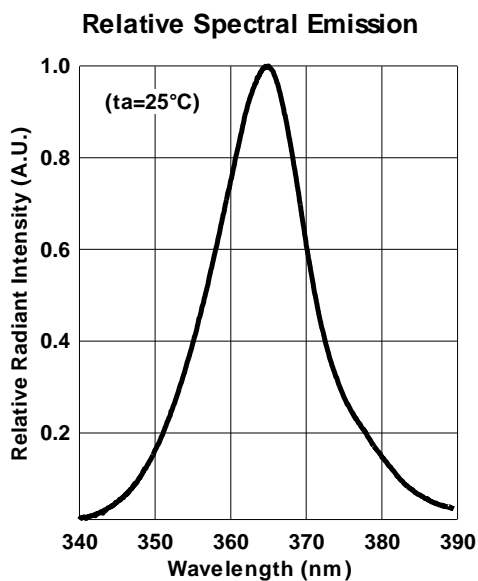
◆ Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =350mA		4.2	5.0	V
Pulsed Forward Voltage	V _{FP}	I _{FP} =0.7A		5.4	6.0	V
Radiated Power	P _O	I _F =350mA		50		mW
Radiant Intensity	I _e	I _F =350mA		7		mW/sr
Peak Wavelength	λ _P	I _F =50mA	360	365	370	nm
Half Width	Δλ	I _F =50mA		16		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±60		deg.
Rise Time	t _r	I _F =50mA		200		ns
Fall Time	t _f	I _F =50mA		150		ns

‡Radiated Power is measured by S3584-08.

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





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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