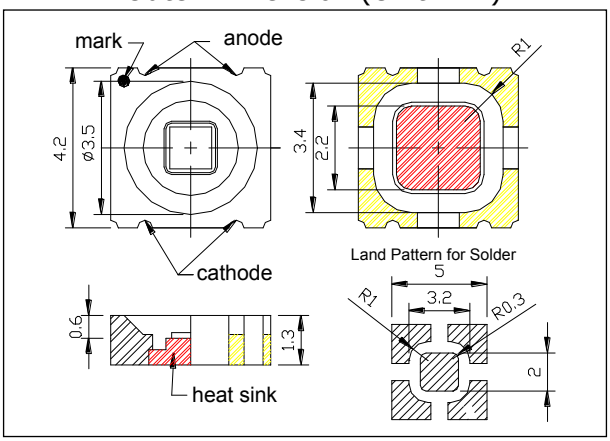
SMCC365-1100

Ceramics SMD type LED with Heat Sink

<Specifications>

1. Product Name: Ceramics SMD UV LED
2. Type Number: SMCC365-1100
3. Chip:
   - Chip material: AlGaN
   - Chip Dimension: 1000umx1000um
   - Peak Wavelength: 365nm typ.
4. Package
   - Type: Ceramic with Heat Sink
   - Resin Material: Silicone Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25℃]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	2500	mW
Forward Current	IF	500	mA
Pulse Forward Current*	IFP	700	mA
Reverse Voltage	VR	10	V
Thermal Resistance**	Rthja	6	K/W
Junction Temperature	Tj	140	℃
Operating Temperature	TOPR	-30 ~ +130	℃
Storage Temperature	TSTG	-30 ~ +150	℃
Soldering Temperature***	TSOL	265	℃

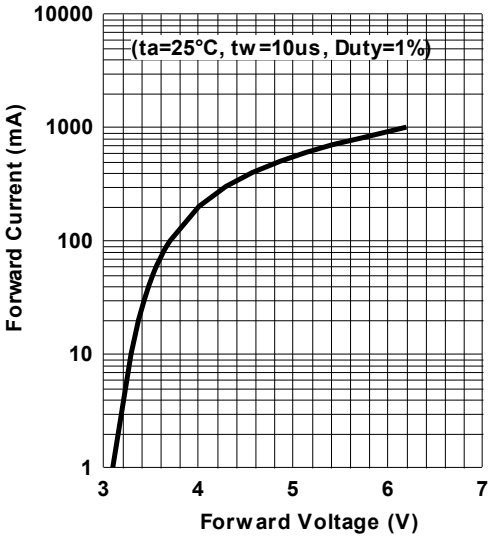
* Duty=1% and Pulse Width=10μs.
** Junction - mounted on metal block
*** Soldering condition must be completed within 3 second at 265 ℃.

Electro-Optical Characteristics [Ta=25℃]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=350mA		4.2	5.0	V
Pulsed Forward Voltage	VFP	IF=700mA		5.4	6.0	V
Radiated Power*	PO	IF=350mA		50		mW
Radiant Intensity**	IE	IF=350mA		7		mW/sr
Peak Wavelength	λP	IF=50mA	360	365	370	nm
Half Width	Δλ	IF=50mA		16		nm
Viewing Half Angle	θ1/2	IF=50mA		±60		deg
Rise Time	tr	IF=50mA		200		ns
Fall Time	tf	IF=50mA		150		ns

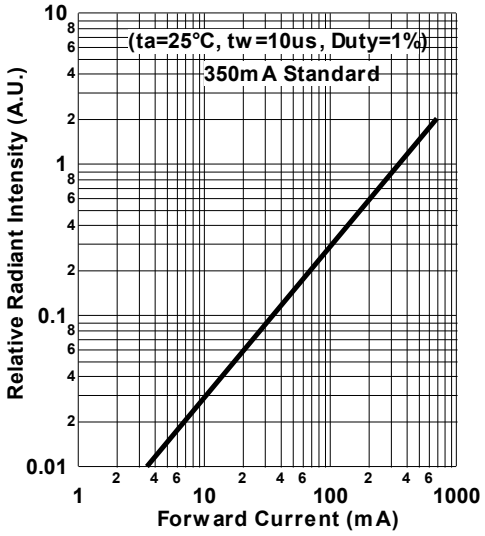
* Measured by S3584-08
** Measured by Ando Optical Multi Meter AQ2104 & AQ2741

RoHS Compliant

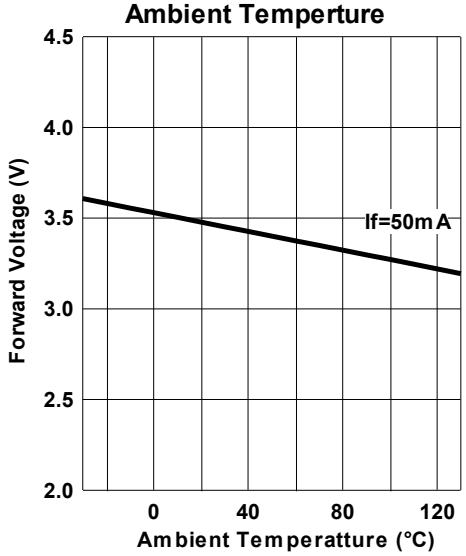
Forward Curent - Forward Voltage



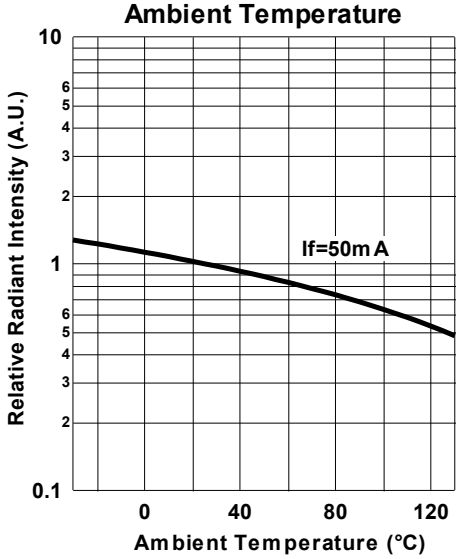
Relative Radiant Intensity - Forward Current



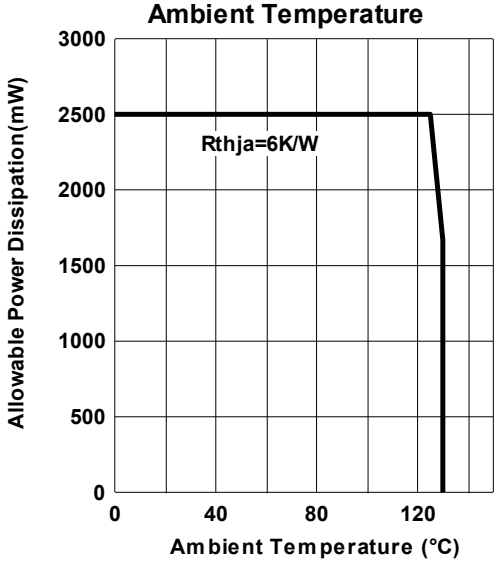
Forward Voltage - Ambient Temperture



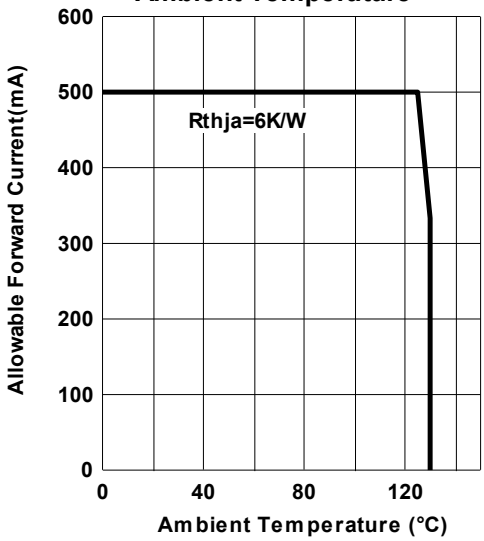
Relative Radiant Intensity - Ambient Temperature

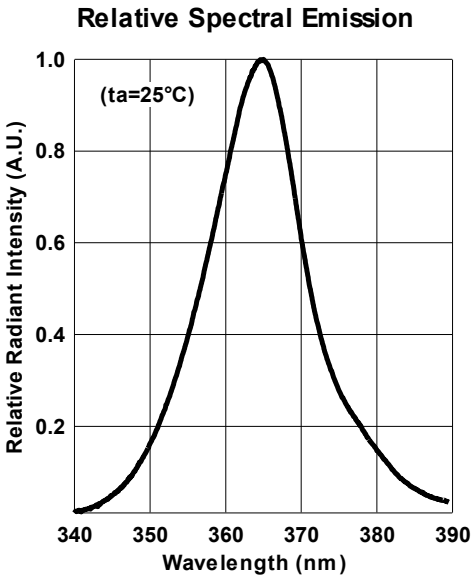


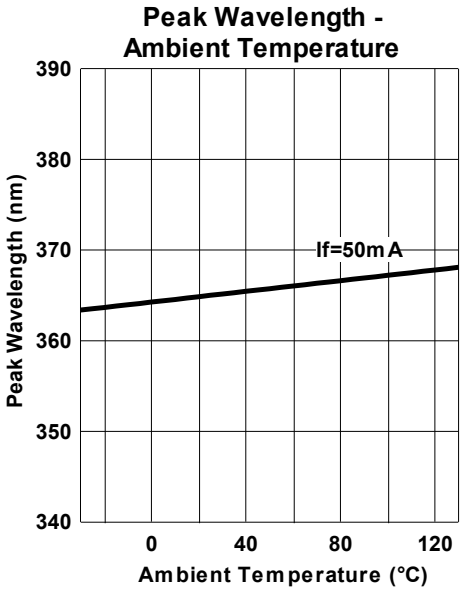
Allowable Power Dissipation - Ambient Temperature

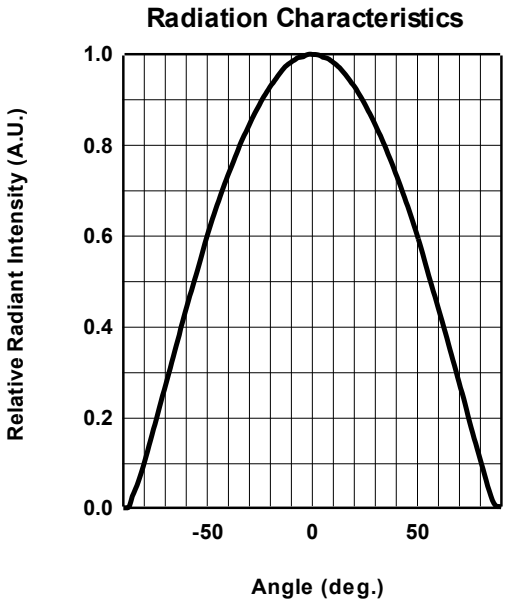


Allowable Forward Current - Ambient Temperature




Relative Spectral Emission
(ta=25°C)
Relative Radiant Intensity (A.U.)
1.0
0.8
0.6
0.4
0.2
340
350
360
370
380
390
Wavelength (nm)


Peak Wavelength -
Ambient Temperature
If=50mA
Peak Wavelength (nm)
390
380
370
360
350
340
0
40
80
120
Ambient Temperature (°C)


Radiation Characteristics
Relative Radiant Intensity (A.U.)
1.0
0.8
0.6
0.4
0.2
0.0
-50
0
50
Angle (deg.)

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 <30ºC, <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 - 30ºC, <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.