

# SMCC365-1100

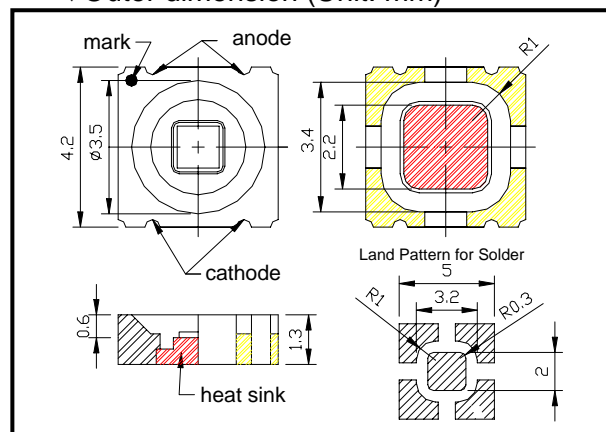
High power UV LED in ceramics SMD

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]

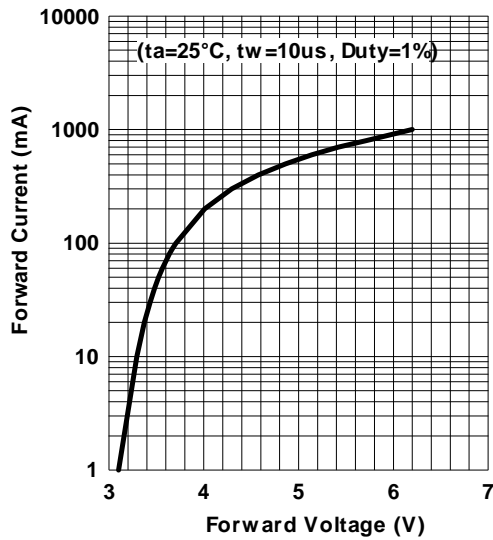
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=350mA		4.2	5.0	V
Pulsed Forward Voltage	VFP	IFP=0.7A		5.4	6.0	V
Radiated Power	PO	IF=350mA		50		mW
Radiant Intensity	Ie	IF=350mA		7		mW/sr
Peak Wavelength	λP	IF=50mA	360	365	370	nm
Half Width	Δλ	IF=50mA		16		nm
Viewing Half Angle	θ 1/2	IF=50mA		±60		deg.
Rise Time	tr	IF=50mA		200		ns
Fall Time	tf	IF=50mA		150		ns

‡Radiated Power is measured by S3584-08.

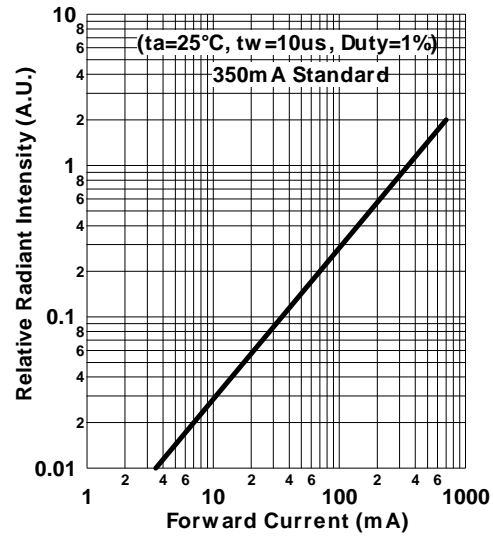
‡Radiated intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741



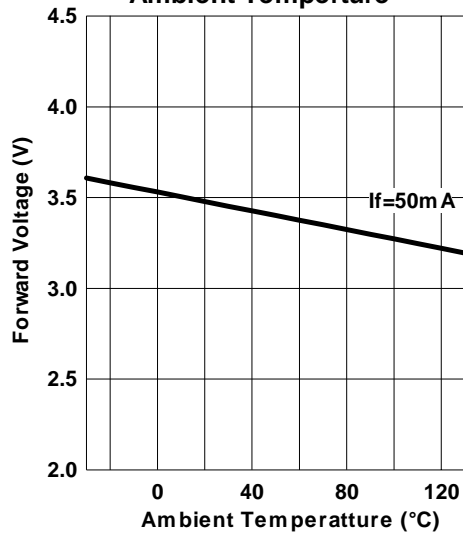
Forward Current - Forward Voltage



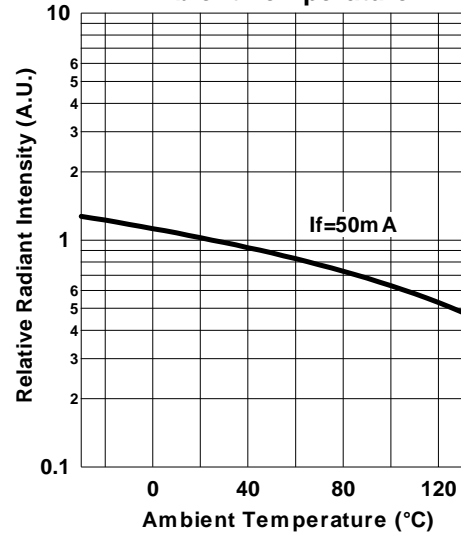
Relative Radiant Intensity - Forward Current



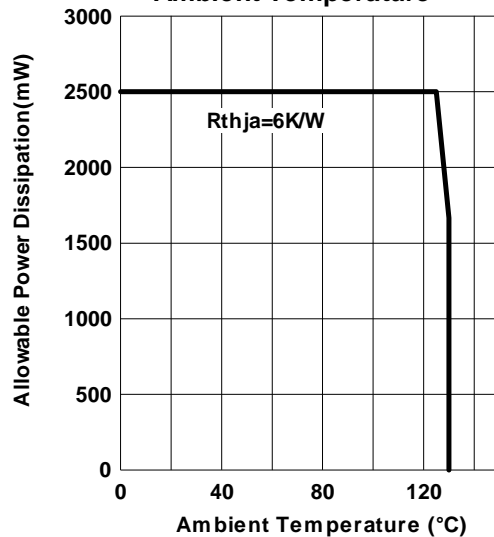
Forward Voltage - Ambient Temperature



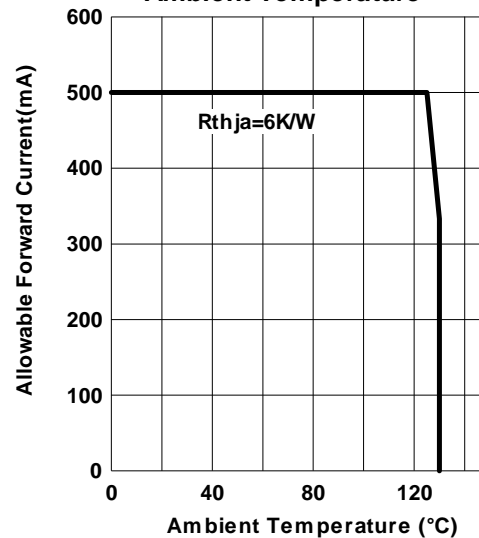
Relative Radiant Intensity - Ambient Temperature



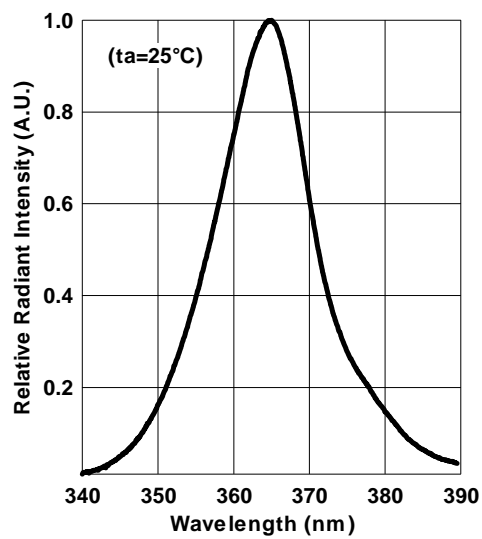
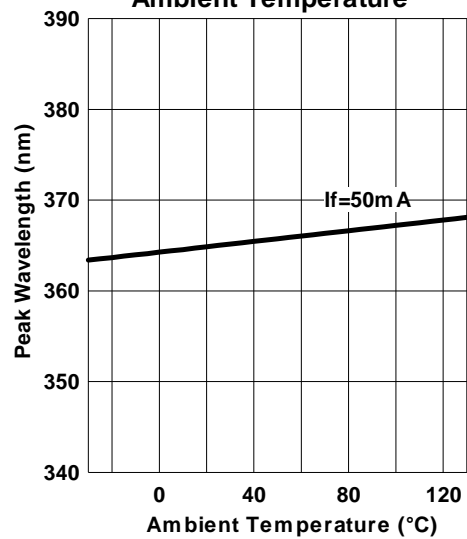
Allowable Power Dissipation - Ambient Temperature



Allowable Forward Current - Ambient Temperature



Relative Spectral Emission

Peak Wavelength -  
Ambient Temperature

Radiation Characteristics

