SMCC365-1100-04

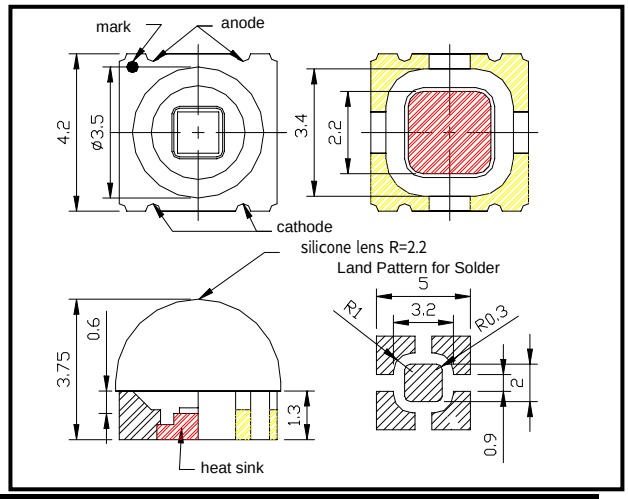
High power UV LED in ceramics SMD

SMCC365-1100-04 is an AlGaN 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 ±35° of viewing half angle.

♦Specifications

1) Product Name	Ceramics SMD UV LED
2) Type No.	SMCC365-1100-04
3) Chip	
(1) Chip Material	AlGaN
(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_D	2500	mW	Ta=25°C
Forward Current	I_F	500	mA	Ta=25°C
Pulse Forward Current	I_{FP}	700	mA	Ta=25°C
Reverse Voltage	V_R	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_F	I_{FP}=0.7A		5.4	6.0	V
Radiated Power	P_O	I_F=350mA		50		mW
Radiant Intensity	Ie	I_F=350mA		10		mW/sr
Peak Wavelength	λ_P	I_F=50mA	360	365	370	nm
Half Width	$\Delta\lambda$	I_F=50mA		16		nm
Viewing Half Angle	$\theta_{1/2}$	I_F=50mA		±35		deg.
Rise Time	tr	I_F=50mA		200		ns
Fall Time	tf	I_F=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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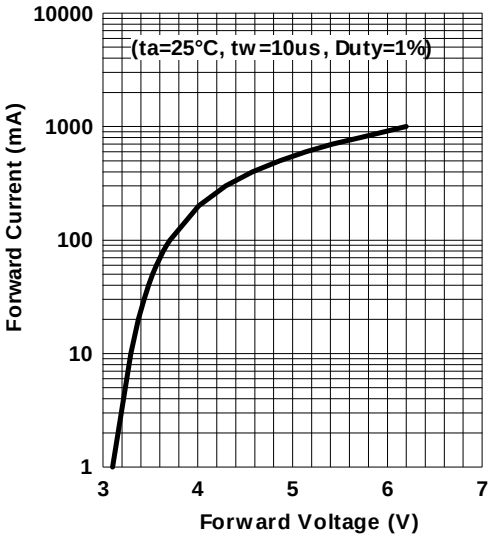
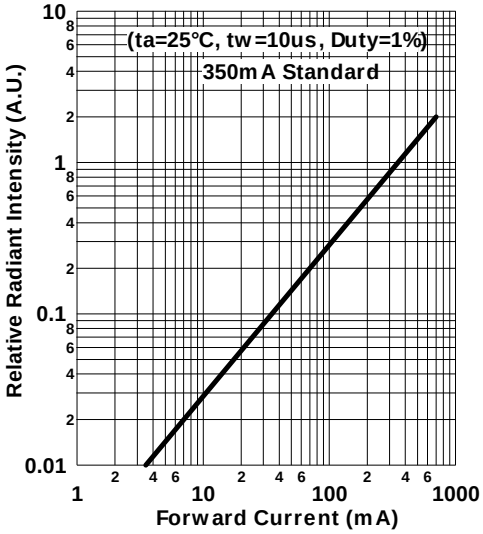
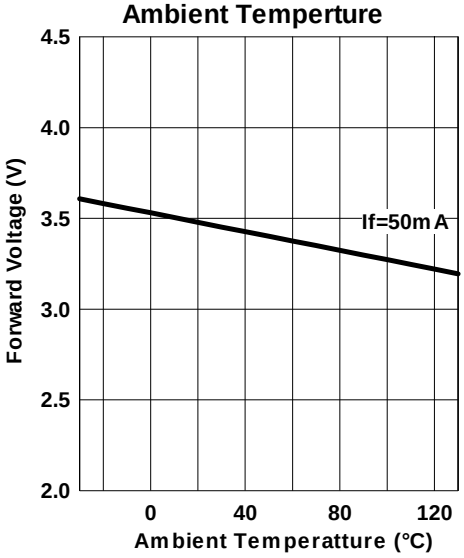
Forward Curent - Forward Voltage



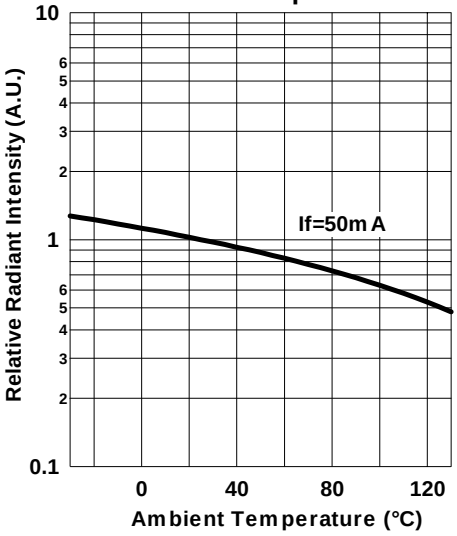
Relative Radiant Intensity - Forward Current



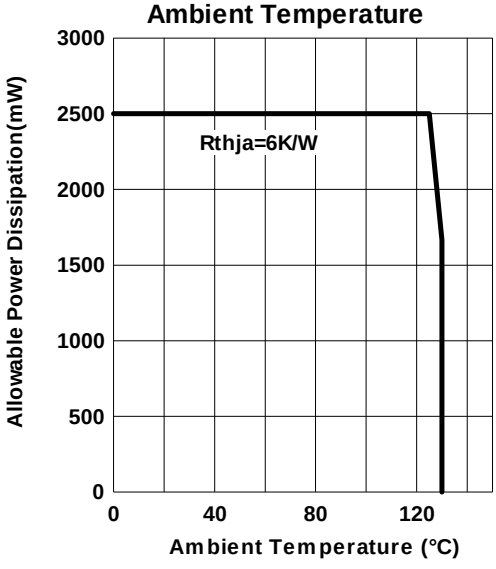
Forward Voltage - Ambient Temperture



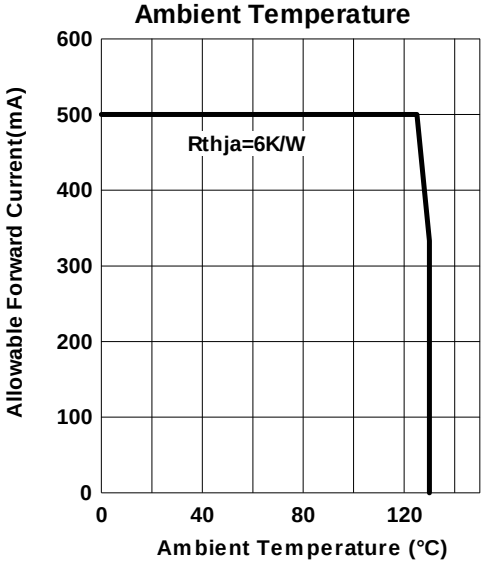
Relative Radiant Intensity - Ambient Temperature



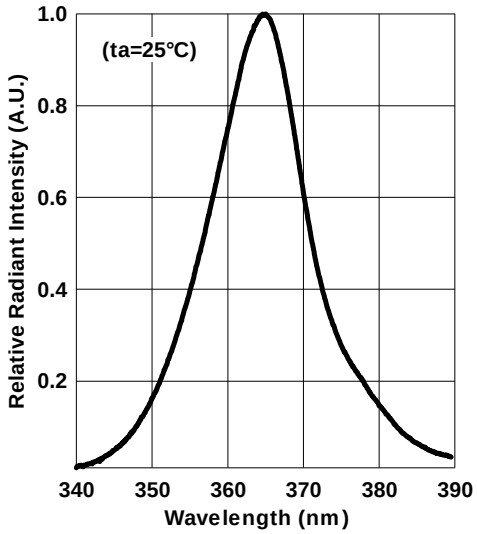
Allowable Power Dissipation - Ambient Temperature



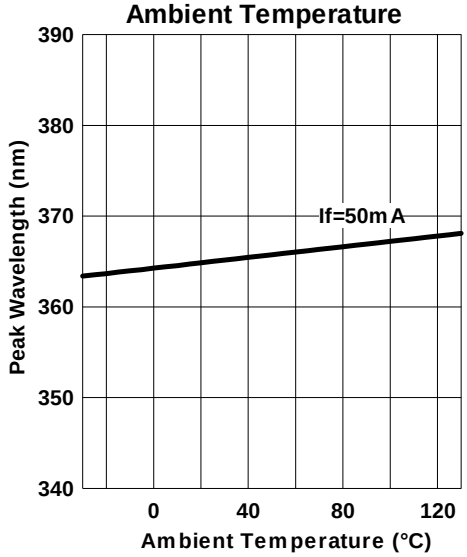
Allowable Forward Current - Ambient Temperature



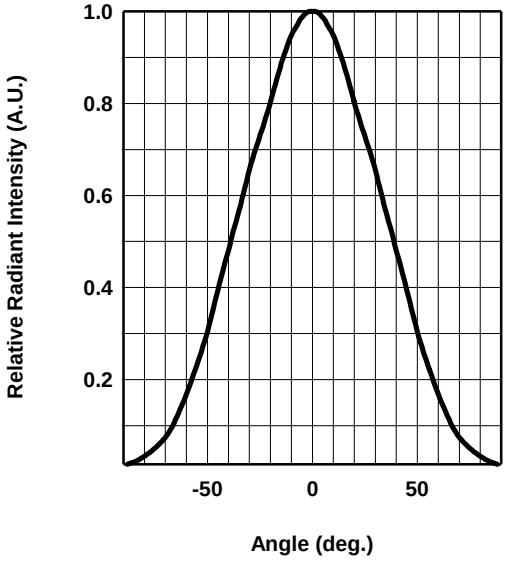
Relative Spectral Emission



Peak Wavelength - Ambient Temperature



Radiation Characteristics



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