

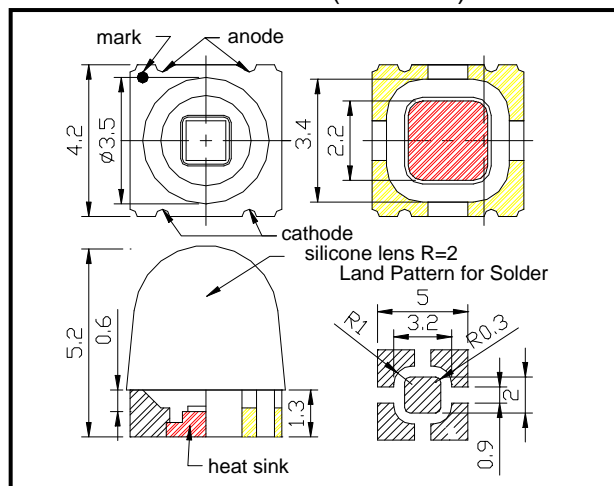
# SMCC375-1100-02 High Power type Top LED

SMCC375-1100-02 is an AlGaIn LED mounted on ceramic package with copper heat sink and is covered with silicone resin lense. On forward bias, it emits a band of 375nm. It is 35mW/sr typical of Radiant Intensity and  $\pm 10^\circ$  of viewing half angle.

## ◆ Specifications

- 1) Product Name Ceramics SMD UV LED
- 2) Type No. SMCC375-1100-02
- 3) Chip
  - (1) Chip Material AlGaIn
  - (2) Chip Dimension 1000um\*1000um
  - (3) Peak Wavelength 375nm typ.
- 4) Package
  - (1) Type Ceramic with Heatsink
  - (2) Lens Silicone Resin R=2mm

## ◆ Outer dimension (Unit: mm)



## ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	1250	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	350	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
Operating Temperature	T <sub>OPR</sub>	-30 ~ +85	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	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

## ◆ 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> =200mA		4.0	4.5	V
Pulsed Forward Voltage	V <sub>F</sub>	I <sub>FP</sub> =0.5A		4.7	5.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Total Radiated Power	P <sub>o</sub>	I <sub>F</sub> =200mA		40		mW
Radiant Intensity	I <sub>e</sub>	I <sub>F</sub> =200mA		40		mW/sr
Peak Wavelength	$\lambda_P$	I <sub>F</sub> =50mA		375		nm
Half Width	$\Delta\lambda$	I <sub>F</sub> =50mA		14		nm
Viewing Half Angle	$\theta_{1/2}$	I <sub>F</sub> =50mA		$\pm 10$		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