

SMC505

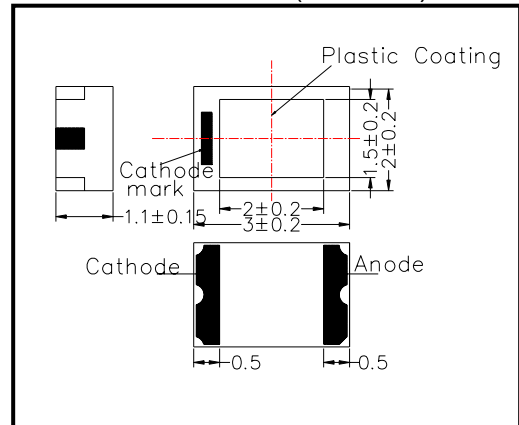
High Bright Greenish Blue color SMD LED on ceramics

SMC505 consists of an InGaN LED mounted on the ceramics package and is sealed with silicone resin. It emits a spectral band of radiation at 505nm.

◆ Specifications

1) Product Name	SMD type Blue color LED
2) Type No.	SMC505
3) Chip	
(1) Chip Material	InGaN
(2) Peak Wavelength	505nm typ.
4) Package	
(1) Package	Ceramics
(2) Lens	Silicone resin

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Rating

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	120	mW	$T_a=25^\circ\text{C}$
Forward Current	I_F	30	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	V_R	5	V	$T_a=25^\circ\text{C}$
Operating Temperature	T_{OPR}	-20 ~ +85	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-30 ~ +100	$^\circ\text{C}$	
Soldering Temperature	T_{SOL}	220	$^\circ\text{C}$	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 220°C

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$		3.5	4.30	V
Reverse Current	I_R	$V_R=5\text{V}$			10	μA
Total Radiated Power	P_O	$I_F=20\text{mA}$		1.0		mW
Brightness	I_V	$I_F=20\text{mA}$		75		mcd
Radiant Intensity	I_E	$I_F=20\text{mA}$		0.3		mW/sr
Peak Wavelength	λ_P	$I_F=20\text{mA}$	495	505	515	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		30		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		±55		deg.

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.