

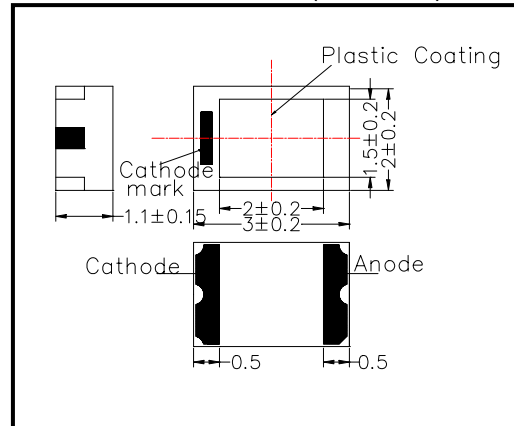
## SMC490 High Bright Greenish Blue color SMD LED on ceramics

SMC490 consists of an InGaN LED mounted on the ceramics package and is sealed with silicone resin. It emits a spectral band of radiation at 490nm.

### ◆ Specifications

- |                     |                       |
|---------------------|-----------------------|
| 1) Product Name     | SMD Greenish Blue LED |
| 2) Type No.         | SMC490                |
| 3) Chip             |                       |
| (1) Chip Material   | InGaN                 |
| (2) Peak Wavelength | 490nm 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 $^\circ\text{C}$

### ◆ Electro-Optical Characteristics [ $T_a=25^\circ\text{C}$ ]

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	$\mu\text{A}$
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		$\text{mW}/\text{sr}$
Peak Wavelength	$\lambda_P$	$I_F=20\text{mA}$	480	490	500	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		30		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		$\pm 55$		deg.

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.