

SMC430

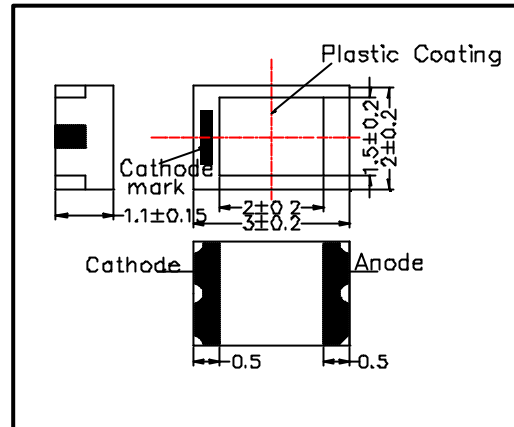
High Bright Blue color SMD LED on ceramics

SMC430 consists of an GaN LED mounted on the ceramics package and is sealed with silicone resin. It emits a spectral band of radiation at 430nm.

Specifications

- | | |
|---------------------|-------------------------|
| 1) Product Name | SMD type Blue color LED |
| 2) Type No. | SMC430 |
| 3) Chip | |
| (1) Chip Material | GaN |
| (2) Peak Wavelength | 430nm 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	125	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 [Ta=25 $^\circ\text{C}$]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$		3.8	4.8	V
Reverse Current	I_R	$V_R=5\text{V}$			10	μA
Total Radiated Power	P_O	$I_F=20\text{mA}$		0.25		mW
Brightness	I_V	$I_F=20\text{mA}$		10		mcd
Radiant Intensity	I_E	$I_F=20\text{mA}$		0.1		mW/sr
Peak Wavelength	λ_P	$I_F=20\text{mA}$	420	430	440	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		50		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.