

# SMC630

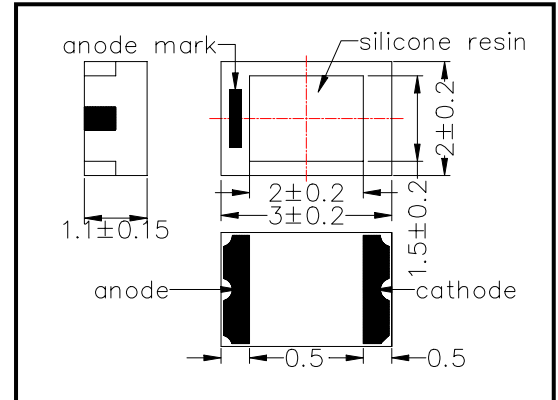
High Bright Red color SMD LED on ceramics

SMC630 consists of an AlInGaP/GaP LED mounted on the ceramics package and is sealed with silicone or epoxy resin. It emits a spectral band of radiation at 630nm.

### ◆ Specifications

1) Product Name	SMD type red color LED
2) Type No.	SMC630
3) Chip	
(1) Chip Material	AlInGaP/GaP
(2) Peak Wavelength	630nm typ.
4) Package	
(1) Package	Ceramics
(2) Lens	Silicone or Epoxy resin

### ◆ Outer dimension (Unit : mm)



### ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	$P_D$	120	mW	$T_a=25^\circ\text{C}$
Forward Current	$I_F$	50	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	$V_R$	5	V	$T_a=25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-20 ~ +80	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-30 ~ +80	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	240	$^\circ\text{C}$	

‡Soldering condition: Soldering condition must be completed within 3 seconds at  $240^\circ\text{C}$

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$		2.05	2.30	V
Reverse Current	$I_R$	$V_R=5\text{V}$			10	$\mu\text{A}$
Total Radiated Power	$P_O$	$I_F=20\text{mA}$		5.0		mW
Brightness	$I_V$	$I_F=20\text{mA}$		420		mcd
Peak Wavelength	$\lambda_P$	$I_F=20\text{mA}$	620	630	640	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		15		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		$\pm 55$		deg.

‡Total Radiated Power is measured by Photodyne #500

‡Brightness is measured by Tektronix J-16.