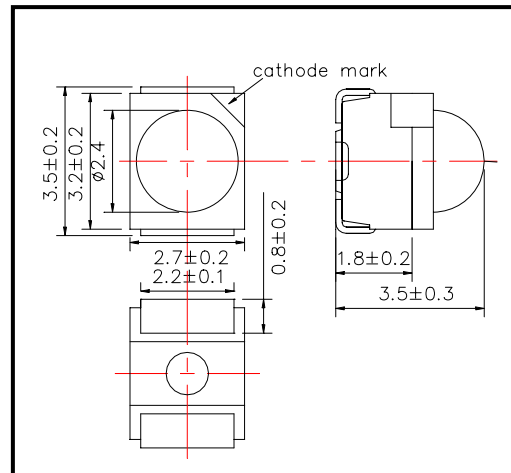


## SMT630E-24 High Performance Red color TOP LED with Lens

SMT630E-24 consists of an AlGaInP LED mounted on the lead frame as TOP LED package with plastic ball lens and is 1,500mcd typical of Brightness. It emits a spectral band of radiation at 635nm.

### ◆ Outer dimension (Unit: mm)



### ◆ Specifications

1) Product Name	TOP LED
2) Type No.	SMT630E-24
3) Chip	
(1) Chip Material	AlGaInP
(2) Peak Wavelength	635nm typ.
4) Package	
(1) Lead Frame Die	Silver Plated
(2) Package Resin	PPA Resin
(3) Lens	Epoxy and Styrene

### ◆ Absolute Maximum Rating

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	120	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	40	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	200	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-20 ~ +80	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +80	°C	
Soldering Temperature	T <sub>SOL</sub>	240	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 230°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> =20mA		2.2	2.4	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> =20mA	3.0	4.5		mW
Brightness	I <sub>V</sub>	I <sub>F</sub> =20mA	1,000	1,500		mcd
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =20mA		12.5		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	630	635	640	nm
Half Width	Δλ	I <sub>F</sub> =20mA		20		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =20mA		±18		deg.

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.

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