

SMT630-55-24

High Performance Red Color TOP IR LED with Lens

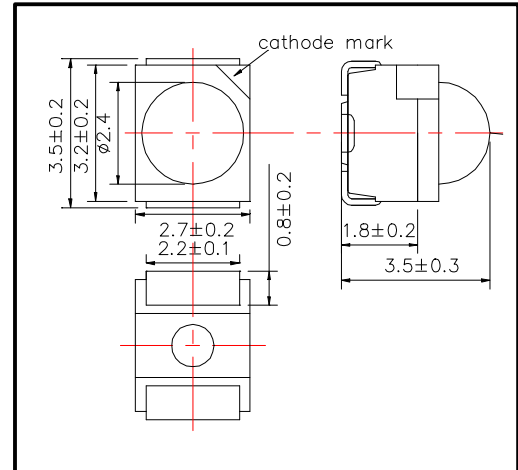
SMT635-55-24 consists of an AlGaInP LED mounted on the lead frame as TOP LED package with plastic ball lens and is 1cd of brightness and 5mW/sr of radiant intensity.

It emits a spectral band of radiation at 635nm.

Outer dimension (Unit: mm)

Specifications

- | | |
|---------------------|-------------------|
| 1) Product Name | TOP LED |
| 2) Type No. | SMT630-55-24 |
| 3) Chip | |
| (1) Chip Material | AlGaInP |
| (2) Emitting area | 550umx550um |
| (3) 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 _D	200	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-20 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +80	°C	
Soldering Temperature	T _{SOL}	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_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.9	2.2	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA	3	5		mW
Radiant Intensity	I _E	I _F =50mA	3	5		mW/sr
Brightness	I _v	I _F =50mA	600	1000		mcd
Peak Wavelength	λ _P	I _F =50mA	625	635	645	nm
Half Width	Δλ	I _F =50mA		20		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±18		deg.
Rise Time	t _r	I _F =50mA		500		ns
Fall Time	t _f	I _F =50mA		100		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.