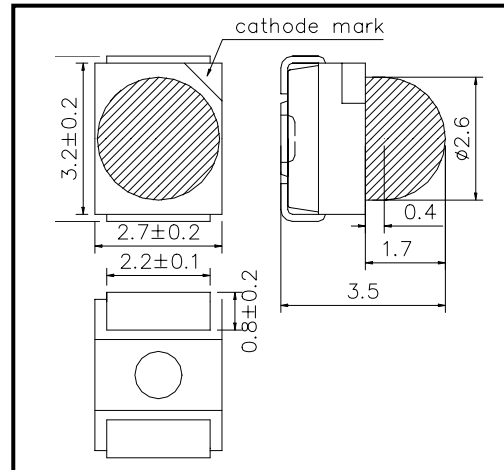


SMT630W-23

High Performance Red color TOP LED with Lens

SMT630W-23 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.	SMT630W-23
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 Resin

◆ Absolute Maximum Rating

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	140	mW	T _a =25°C
Forward Current	I _F	40	mA	T _a =25°C
Pulse Forward Current	I _{FP}	200	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 5 seconds at 240°C

 ◆ Electro-Optical Characteristics [T_a=25°C]

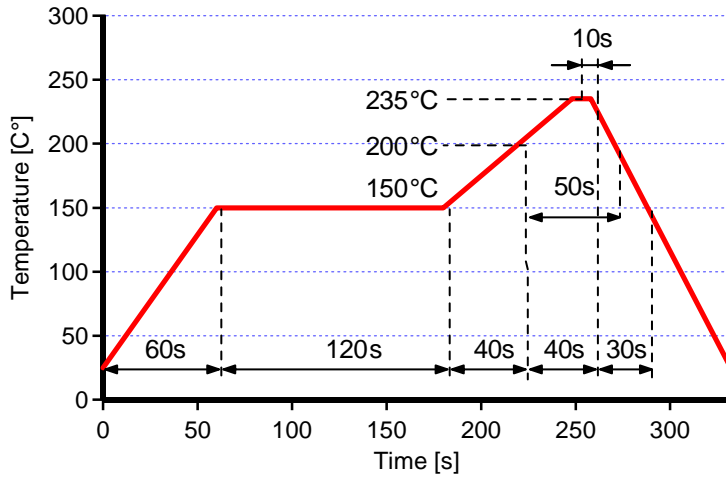
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		2.2	2.6	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =20mA	4.0	7.5		mW
Brightness	I _V	I _F =20mA		1,500		mcd
Radiant Intensity	I _E	I _F =20mA	6.0	10.0		mW/sr
Peak Wavelength	λ _P	I _F =20mA	630	635	640	nm
Half Width	Δλ	I _F =20mA		20		nm
Viewing Half Angle	θ _{1/2}	I _F =20mA		±20		deg.

‡Total Radiated Power is measured by Photodyne #500

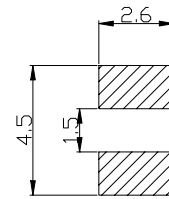
‡Radiant Intensity is measured by Tektronix J-6512.

◆ SMD Application

Recommended reflow soldering profile



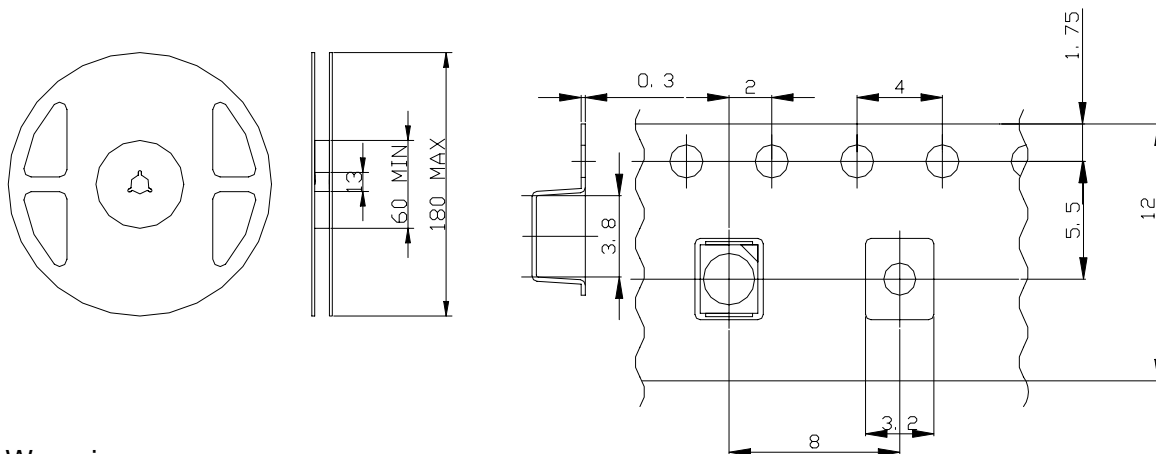
Recommended Land Layout (Unit: mm)



Don't put stress on SMD and a circuit board after soldering.

◆ SMD Packing

Tape and Reel Dimensions (Unit: mm)



◆ Wrapping

Moisture barrier bag aluminum laminated film with a desiccant to keep out the moisture absorption during the transportation and storage.