



SMT505-27

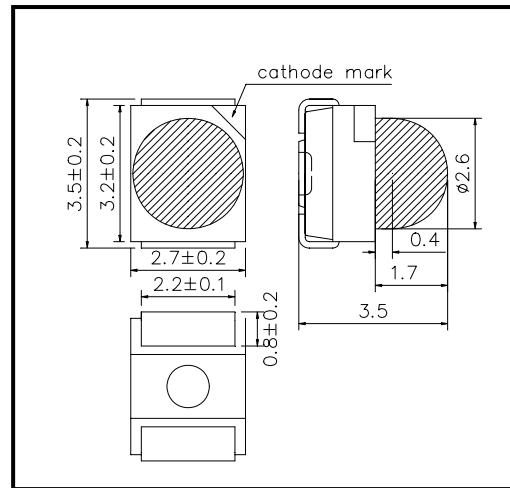
High Performance Cyan color TOP LED with Lens

SMT505-27 consists of an InGaN LED mounted on the lead frame as TOP LED package with a plastic ball lens and 1900mcd of brightness driving at 20mA. It emits a spectral band of radiation at 505nm.

◆ Specifications

1) Product Name	TOP LED
2) Type No.	SMT505-27
3) Chip	
(1) Chip Material	InGaN
(2) Peak Wavelength	505nm typ.
4) Package	
(1) Lead Frame Die	Silver Plated
(2) Package Resin	PPA Resin
(3) Lens	Epoxy Resin
(4) Diameter	Φ2.6mm

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	185	mW	T _a =25°C
Forward Current	I _F	50	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}	255	°C	

‡Soldering condition: Soldering condition must be completed within 10 seconds at 255°C

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		3.30	3.80	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =20mA		10.0		mW
Brightness	I _V	I _F =20mA		1900		mcd
Radiant Intensity	I _E	I _F =20mA		5.5		mW/sr
Peak Wavelength	λ _P	I _F =20mA	500	505	510	nm
Half Width	Δλ	I _F =20mA		30		nm
Viewing Half Angle	θ _{1/2}	I _F =20mA		±25		deg.

‡Total Radiated Power is measured by Photodyne #500

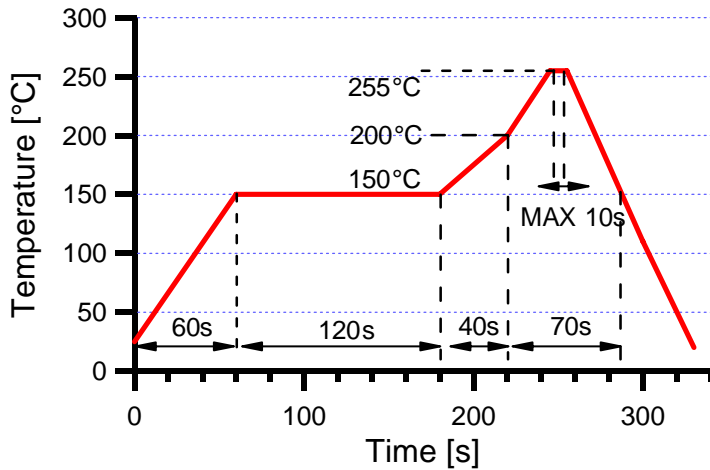
‡Brightness is measured by Tektronix J-16.

USHIO EUROPE B.V. (www.ushio.eu)

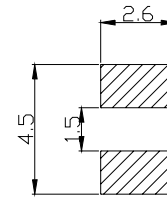
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◆ SMD Application
Recommended reflow soldering profile

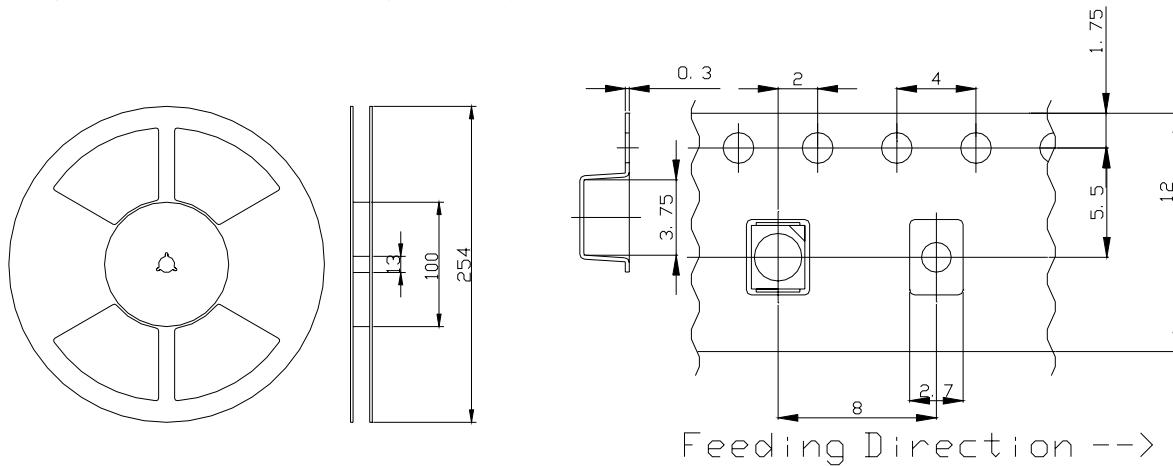


Recommended Land Layout (Unit: mm)



Solder within 4days after opening the aluminum laminated bag and storage the circumstance of less than 30°C and 50%RH during 4days.

◆ 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.