

SMT430R UV TOP LED with UV resistant resin

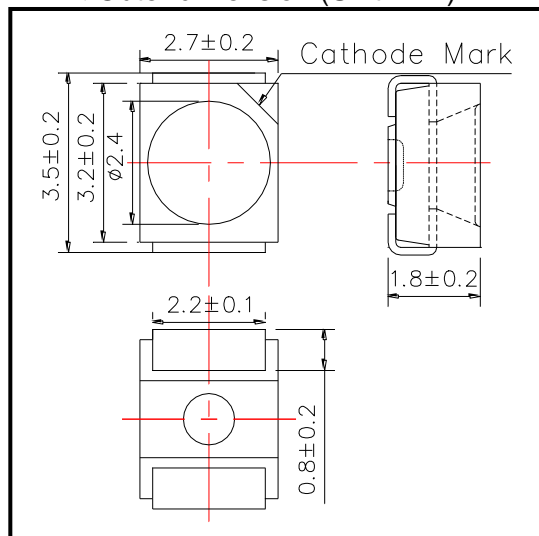
SMT430R consists of an InGaN LED mounted on the lead frame as TOP LED package and is sealed with UV resistant resin.

It emits a spectral band of radiation at 430nm and is designed for long life under UV beam.

◆ Specifications

- 1) Product Name TOP LED
- 2) Type No. SMT430R
- 3) Chip
 - (1) Chip Material InGaN
 - (2) Peak Wavelength 430nm typ.
- 4) Package
 - (1) Lead Frame Die Silver Plated
 - (2) Package Resin PPA Resin
 - (3) Lens UV resistant 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°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		3.4	4.3	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =20mA		12		mW
Radiant Intensity	I _E	I _F =20mA		12		mW/sr
Brightness	I _V	I _F =20mA		300		mcd
Peak Wavelength	λ _P	I _F =20mA	420	430	440	nm
Half Width	Δλ	I _F =20mA		16		nm
Viewing Half Angle	θ _{1/2}	I _F =20mA		±45		deg.

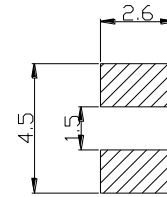
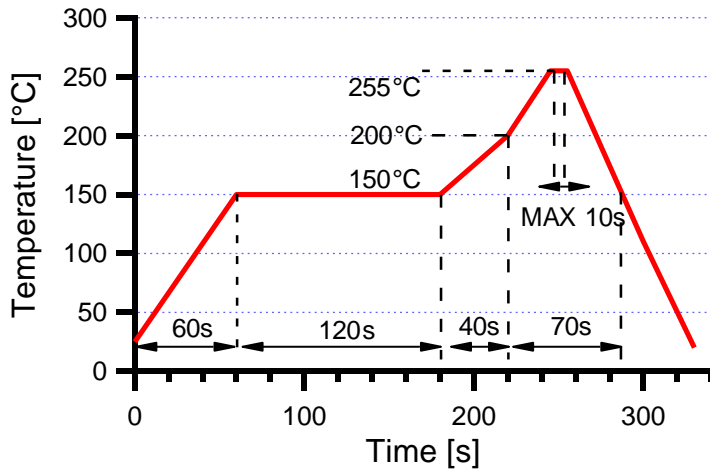
‡Total Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2741.

‡Ando Optical Multi Meter AQ2140 is setted at 400nm range.

‡Radiant Intensity is measured by Epitex's designed and AQ2140 & AQ2741

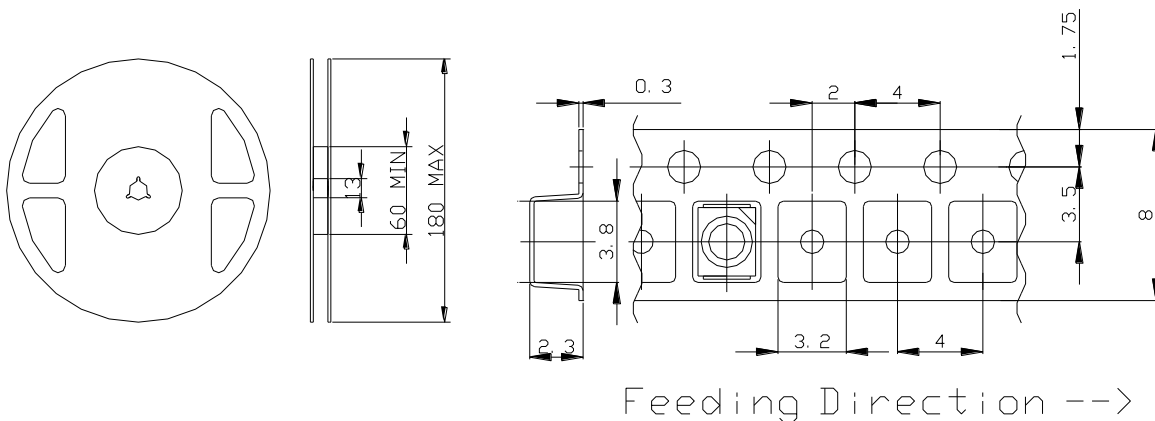
◆ SMD Application
IR-Reflow Soldering Profile for lead free soldering

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)



Feeding Direction -->

◆ Wrapping

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