

SMT375R UV TOP LED

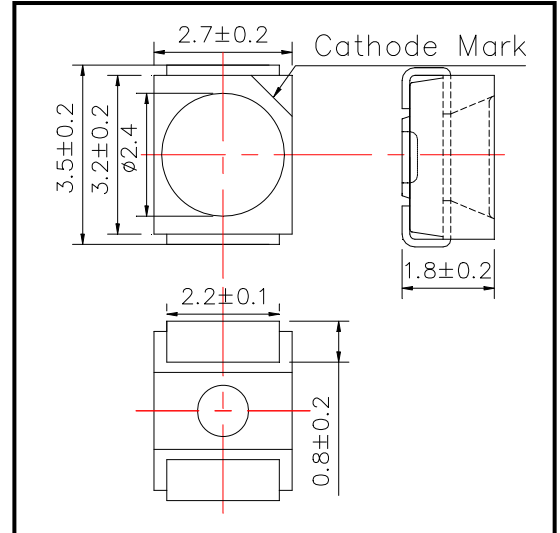
SMT375R consists of an InGaN LED mounted on the lead frame as TOP LED package and is sealed with silicone resin.

It emits a spectral band of radiation at 375nm.

◆ Specifications

1) Product Name	TOP LED
2) Type No.	SMT375R
3) Chip	
(1) Chip Material	InGaN
(2) Peak Wavelength	375nm 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	110	mW	$T_a=25^\circ\text{C}$
Forward Current	I_F	50	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	V_R	5	V	$T_a=25^\circ\text{C}$
Junction Temperature	T_J	120	$^\circ\text{C}$	
Thermal Resistance	R_{thja}	300	K/W	
Operating Temperature	T_{OPR}	-30 ~ +80	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-40 ~ +80	$^\circ\text{C}$	
Soldering Temperature	T_{SOL}	250	$^\circ\text{C}$	

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

◆ Electro-Optical Characteristics [$T_a=25^\circ\text{C}$]

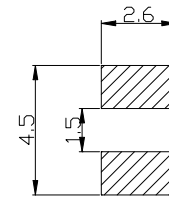
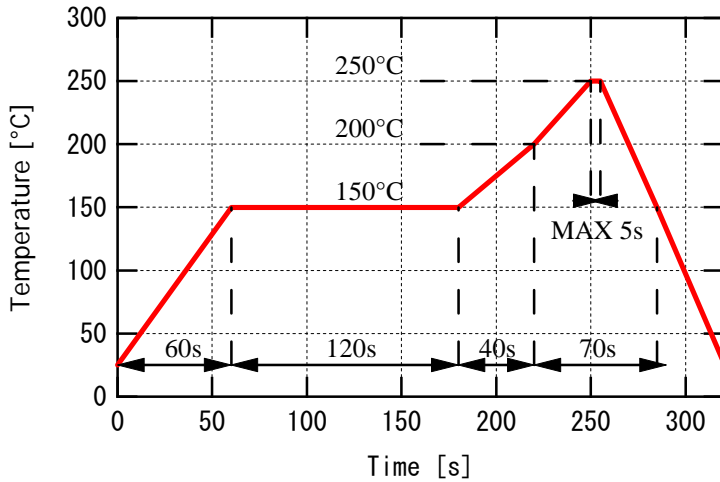
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$		3.5	4.3	V
Total Radiated Power	P_O	$I_F=20\text{mA}$		6		mW
Radiant Intensity	I_E	$I_F=20\text{mA}$		5.0		mW/sr
Brightness	I_V	$I_F=20\text{mA}$		-		mcd
Peak Wavelength	λ_P	$I_F=20\text{mA}$	370	375	380	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		15		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		± 45		deg.

‡Radiated Power is measured by S3584-08.

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

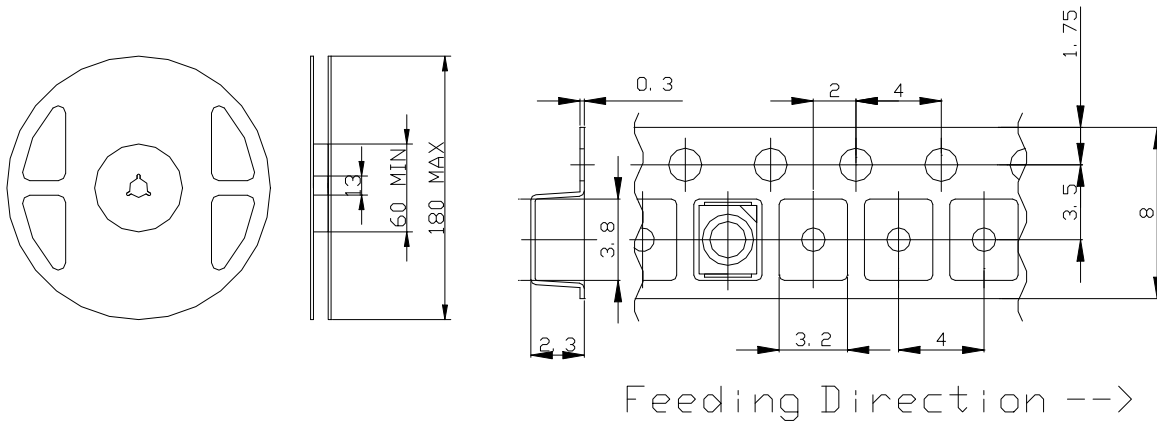
◆ SMD Application
IR-Reflow Soldering Profile for lead free soldering

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.