



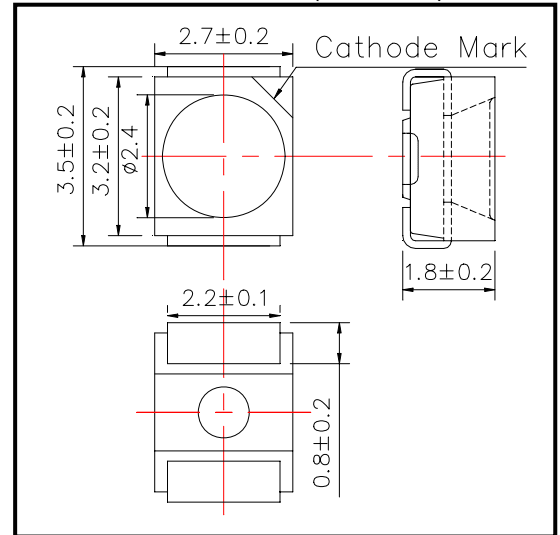
# SMT375R UV TOP LED with UV resistant resin

SMT375R 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 375nm and is designed for long life under UV beam.

**◆ 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	$I_F$	30	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	$V_R$	5	V	$T_a=25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-20 ~ +80	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-30 ~ +80	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	255	$^\circ\text{C}$	

‡Soldering condition: Soldering condition must be completed within 10 seconds at 255 $^\circ\text{C}$

**◆ 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
Reverse Current	$I_R$	$V_R=5\text{V}$			10	$\mu\text{A}$
Total Radiated Power	$P_O$	$I_F=20\text{mA}$		2.5		mW
Radiant Intensity	$I_E$	$I_F=20\text{mA}$		2.0		mW/sr
Brightness	$I_V$	$I_F=20\text{mA}$		-		mcd
Peak Wavelength	$\lambda_P$	$I_F=20\text{mA}$	370	375	380	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		15		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		$\pm 45$		deg.

‡Radiated Power is measured by S3584-08.

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

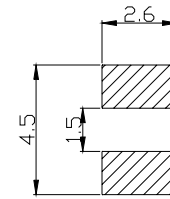
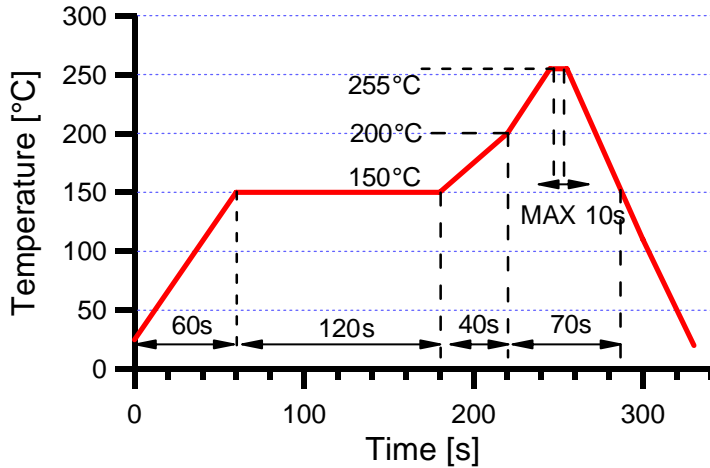
USHIO EUROPE B.V. ([www.ushio.eu](http://www.ushio.eu))

Sky Park, Breguetlaan 16-18, 1438 BC, Oude Meer, The Netherlands

Tel: +31-20-4469-333 Fax: +31-20-4469-360 E-mail: [led@ushio-europe.nl](mailto:led@ushio-europe.nl)

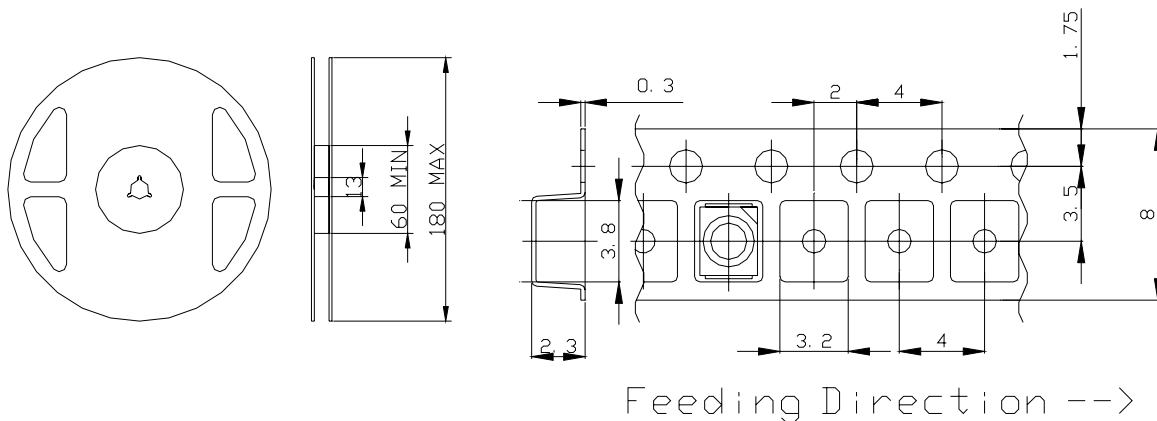
◆ SMD Application  
IR-Reflow Soldering Profile for lead free soldering

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)



◆ Wrapping

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