

## 0603 Package 0.8mm Height Super Yellow LED

### Features

- Package in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Mono-color type
- RoHS



QSLP1XF1



### Descriptions

- The SMD series enable smaller board size, higher packing density, reduced storage space, and small equipment.
- Besides, light weight makes them ideal for miniature applications.

### Applications

- Automotive: backlighting in dashboard and switch
- Telecommunication: indicator and backlighting in telephone and fax
- Flat backlight for LCD, switches and symbols
- General use

### Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TSP1-XF1608H8-3133	AllnGaP	Super Yellow	Water Clear

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## TSP1-XF1608H8-3133

### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +90	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	IFP	60	mA
Soldering Temperature	Tsol	260 for 5 sec.	°C

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### Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	$I_v$	70.7	-----	108	mcd	IF=20mA
Peak Wavelength	$\lambda_p$	-----	591	-----	nm	
Dominant Wavelength	$\lambda_d$	586	-----	594	nm	
Spectrum Radiation Bandwidth	$\Delta \lambda$	-----	15	-----	nm	
Viewing Angle	$2\theta_{1/2}$	-----	100	-----	deg	
Forward Voltage	$V_F$	1.75	-----	2.35	V	
Reverse Current	$I_R$	-----	-----	10	$\mu A$	VR=5V

**Notes:** Tolerance of Luminous Intensity  $\pm 10\%$

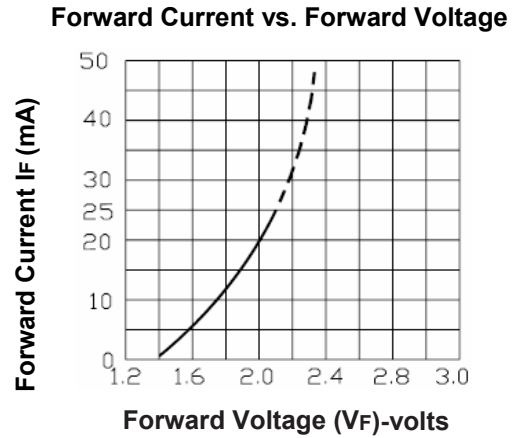
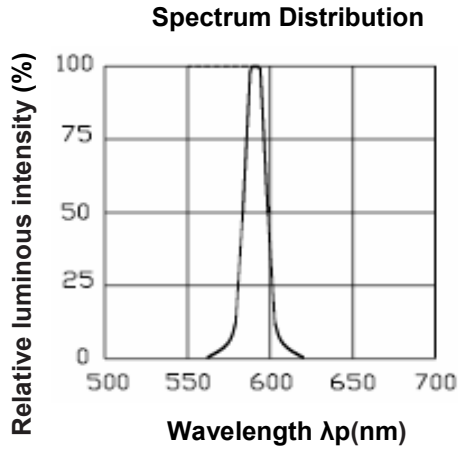
Tolerance of Dominant wavelength  $\pm 1\text{nm}$

Tolerance of Forward Voltage  $\pm 0.1\text{V}$

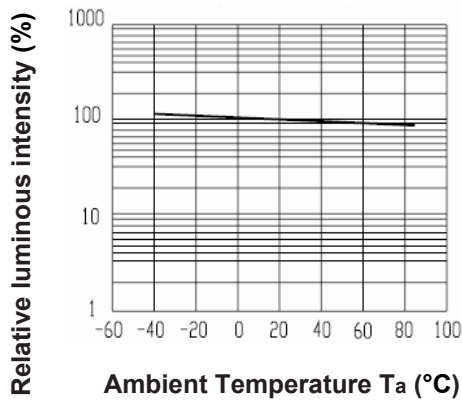
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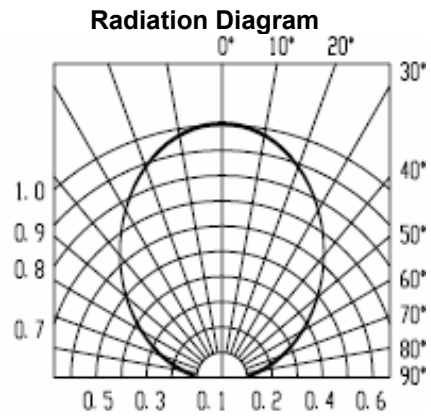
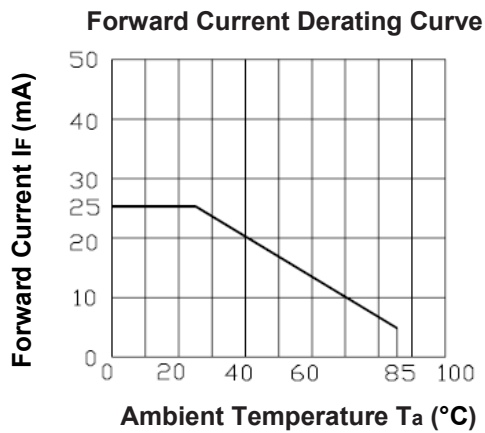
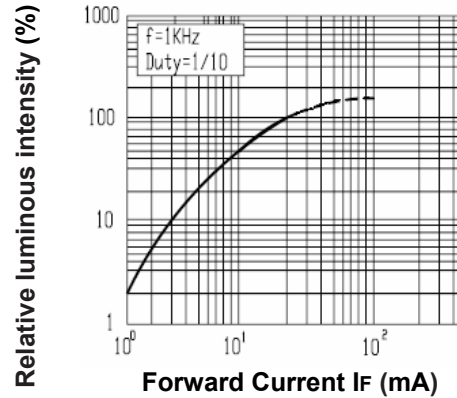
### Typical Electro-Optical Characteristics Curves (Ta=25°C)



### Luminous Intensity vs. Ambient Temperature



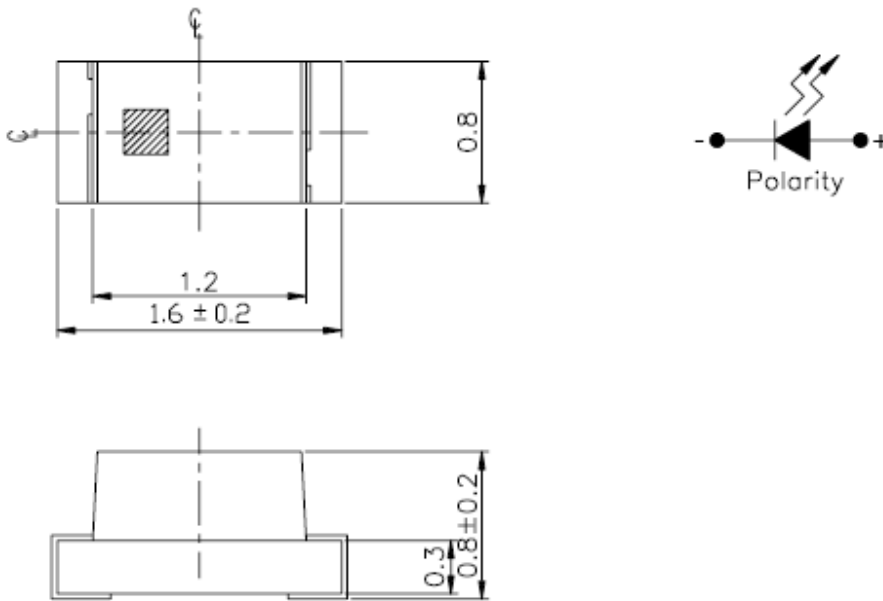
### Luminous Intensity vs. Forward Current



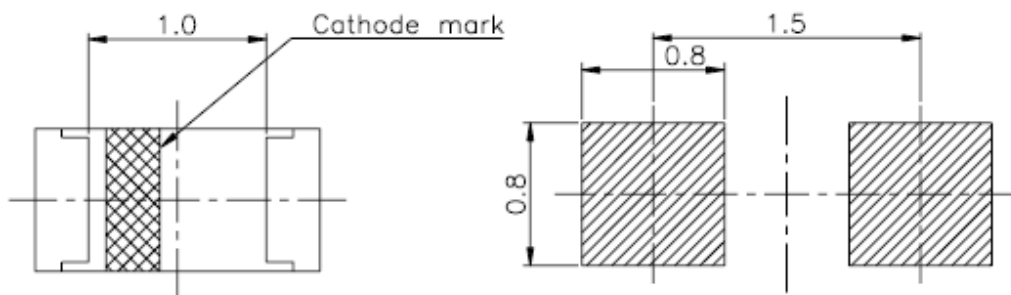
# 0603 Package 0.8mm Height Super Yellow LED

## TSP1-XF1608H8-3133

### Package Outline Dimensions (Unit=mm)



**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm, Unit = mm

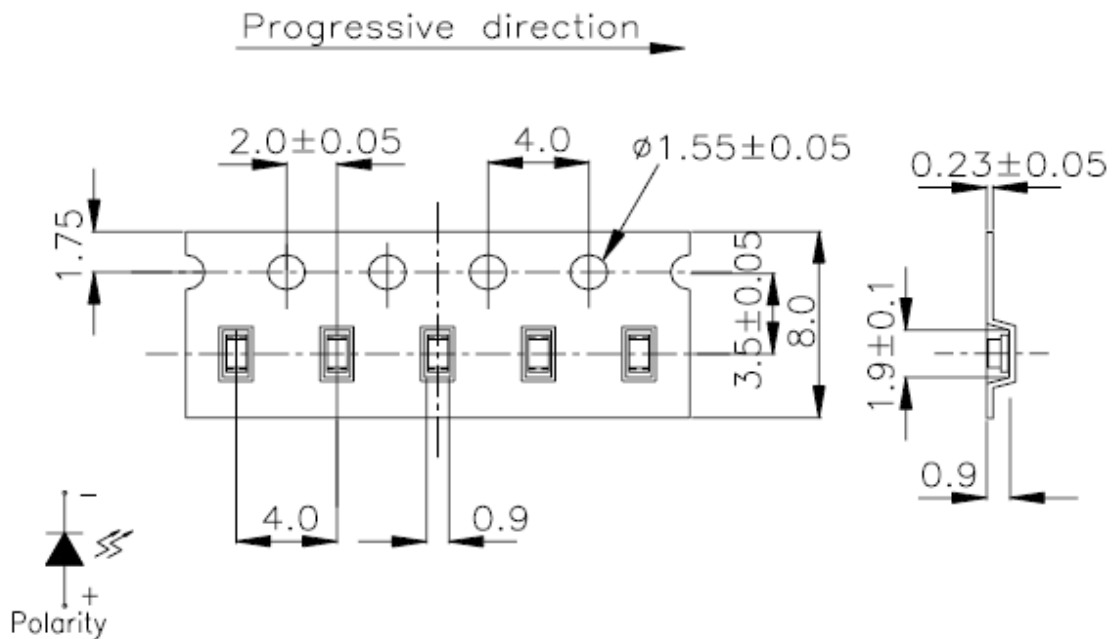


**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm, Unit = mm

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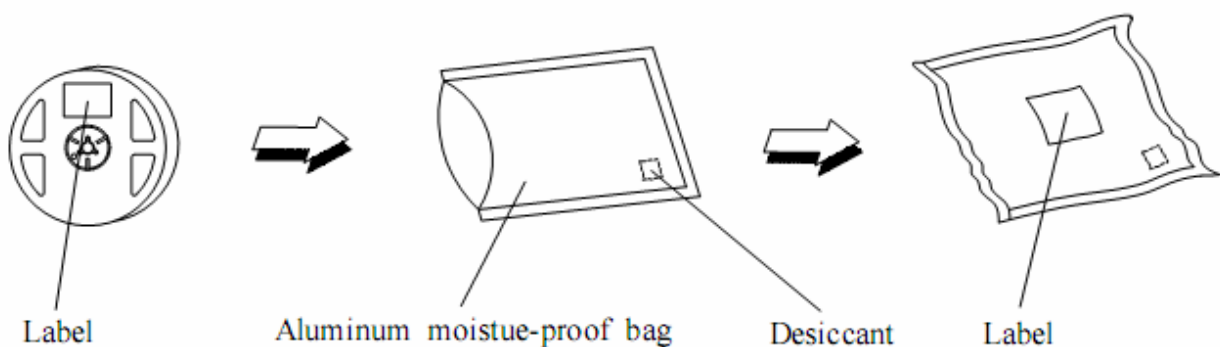
## TSP1-XF1608H8-3133

Carrier Tape Dimensions (Unit=mm): Loaded quantity 2000pcs per reel



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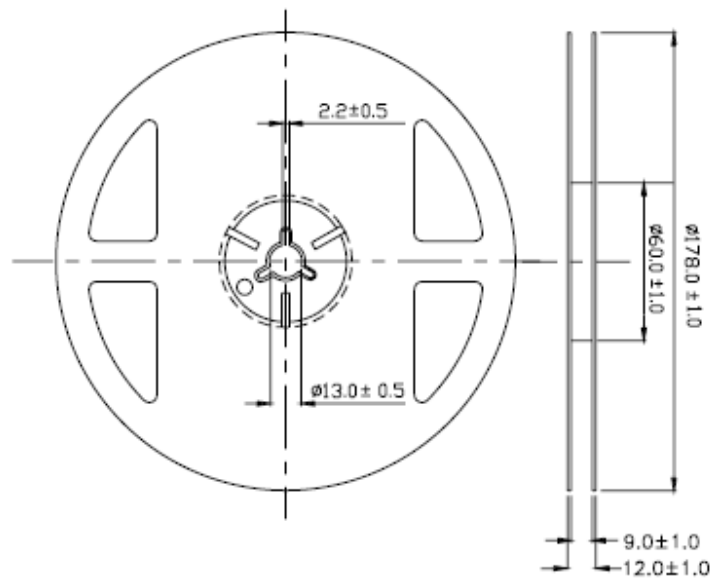
### Moisture Resistant Packaging



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## Reel Dimensions (Unit=mm):

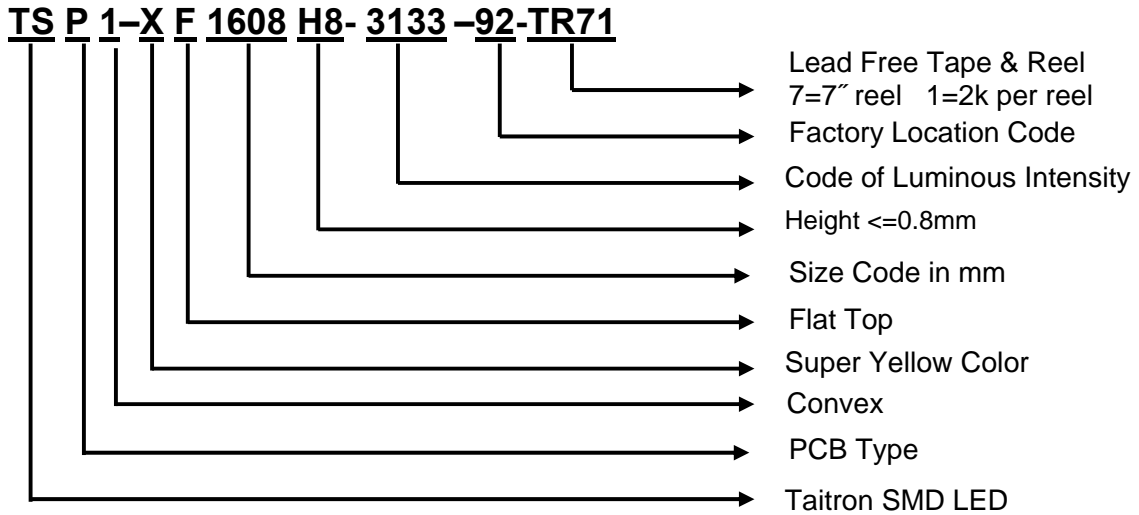


**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm.

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## TSP1-XF1608H8-3133

### Ordering Information

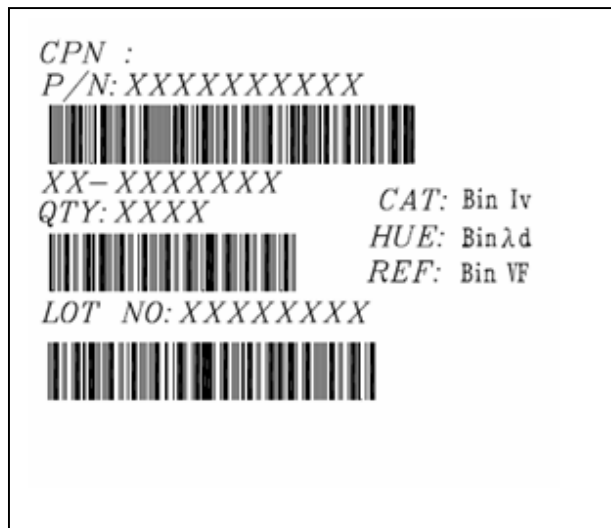


### Label Explanation

**CAT:** Luminous Intensity Rank

**HUE:** Dom. Wavelength Rank

**REF:** Forward Voltage Rank





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## TSP1-XF1608H8-3133

### Bin Range of HUE

Groups	Bin Code	Min	Max	Unit	Condition
F	DD1	586	588	nm	IF=20mA
	DD2	588	590		
	DD3	590	592		
	DD4	592	594		

### Bin Range of Luminous Intensity

Bin Code	Min	Max	Unit	Condition
31	70.7	81.3	mcd	IF=20mA
32	81.3	93.5		
33	93.5	108.0		

### Bin Range of Forward Voltage

Groups	Bin Code	Min	Max	Unit	Condition
B	0	1.75	1.95	V	IF=20mA
	1	1.95	2.15		
	2	2.15	2.35		

**Notes:** Tolerance of Luminous Intensity  $\pm 10\%$

Tolerance of Dominant wavelength  $\pm 1\text{nm}$

Tolerance of Forward Voltage  $\pm 0.1\text{V}$

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**TSP1-XF1608H8-3133**

## How to contact us

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