

## 0603 Package 0.8mm Height Super Blue 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



QSLP1BF1



### 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 dashboards and switch
- Telecommunication: indicator and backlighting in telephone and fax
- Flat backlight for LCD, switches and symbols
- General use
- Indoor signboard use.

### Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TSP1-BF1608H8-2528	InGaN	Super Blue	Water Clear

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## TSP1-BF1608H8-2528

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

Parameter	Symbol	Value	Unit
Reverse Voltage	<b>V<sub>R</sub></b>	5	V
Forward Current	<b>I<sub>F</sub></b>	25	mA
Peak Forward Current (Duty 1/10 @1KHz)	<b>I<sub>FP</sub></b>	100	mA
Power Dissipation	<b>P<sub>d</sub></b>	110	mW
Electrostatic Discharge (HBM)	<b>ESD</b>	150	V
Soldering Temperature	<b>T<sub>sol</sub></b>	260 (for 5 seconds)	°C
Operating Temperature	<b>T<sub>opr</sub></b>	-40 ~ +85	°C
Storage Temperature	<b>T<sub>stg</sub></b>	-40 ~ +90	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	<b>I<sub>v</sub></b>	30.5	-----	53.5	mcd	I <sub>F</sub> =20mA
Viewing Angle	<b>2θ<sub>1/2</sub></b>	-----	100	-----	deg	
Peak Wavelength	<b>λ<sub>p</sub></b>	-----	468	-----	nm	
Dominant wavelength	<b>λ<sub>d</sub></b>	464	-----	472	nm	
Spectrum Radiation Bandwidth	<b>Δλ</b>	-----	35	-----	nm	
Forward Voltage	<b>V<sub>F</sub></b>	2.75	-----	3.65	V	V <sub>R</sub> =5V
Reverse Current	<b>I<sub>R</sub></b>	-----	-----	10	μA	

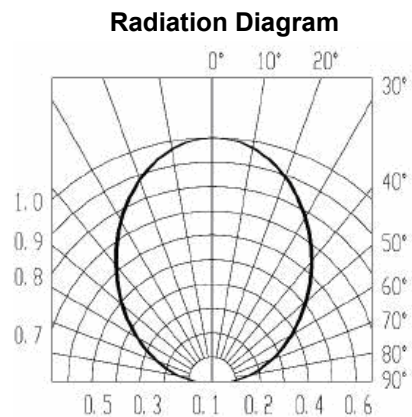
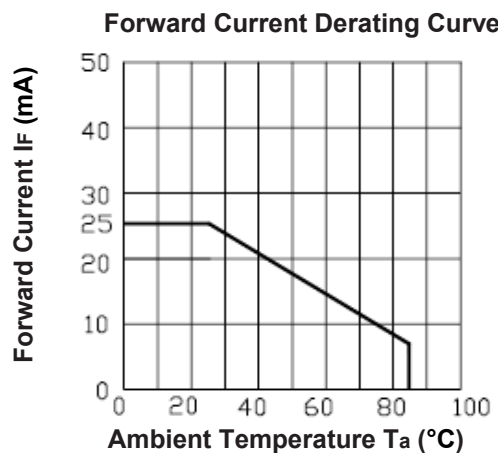
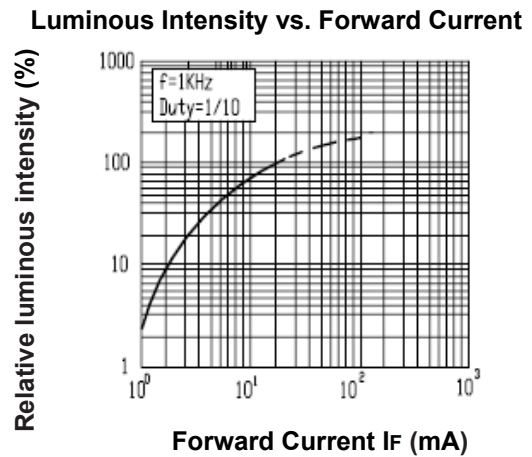
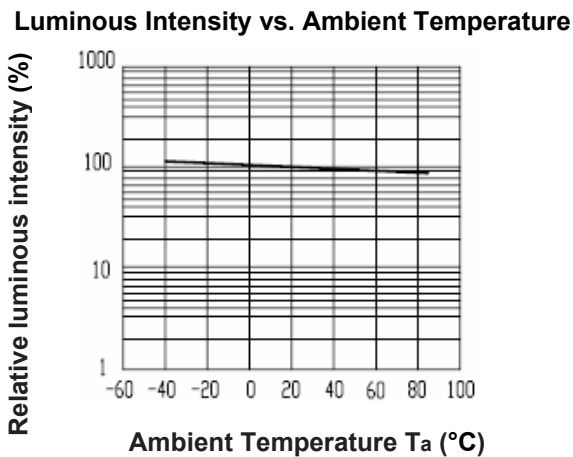
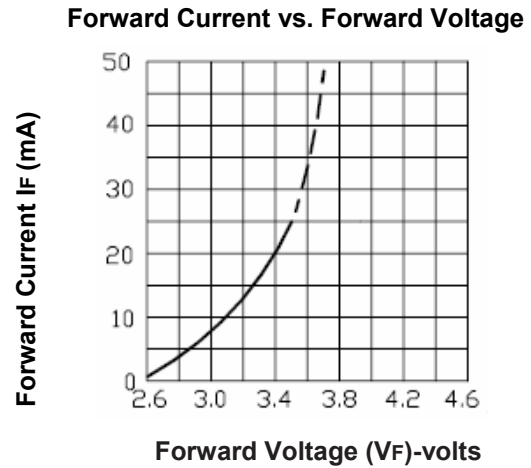
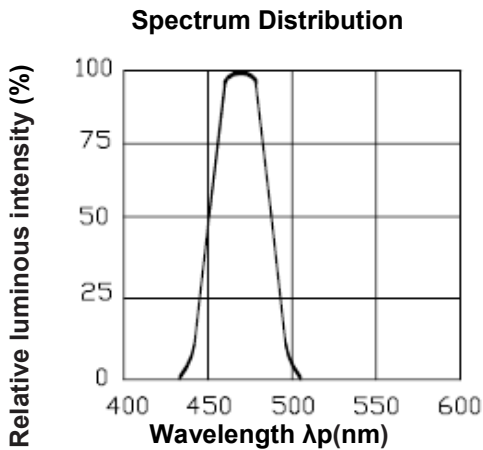
#### Notes:

1. Tolerance of Luminous Intensity ±10%
2. Tolerance of Dominant Wavelength ±1nm
3. Tolerance of Forward Voltage ±0.1V

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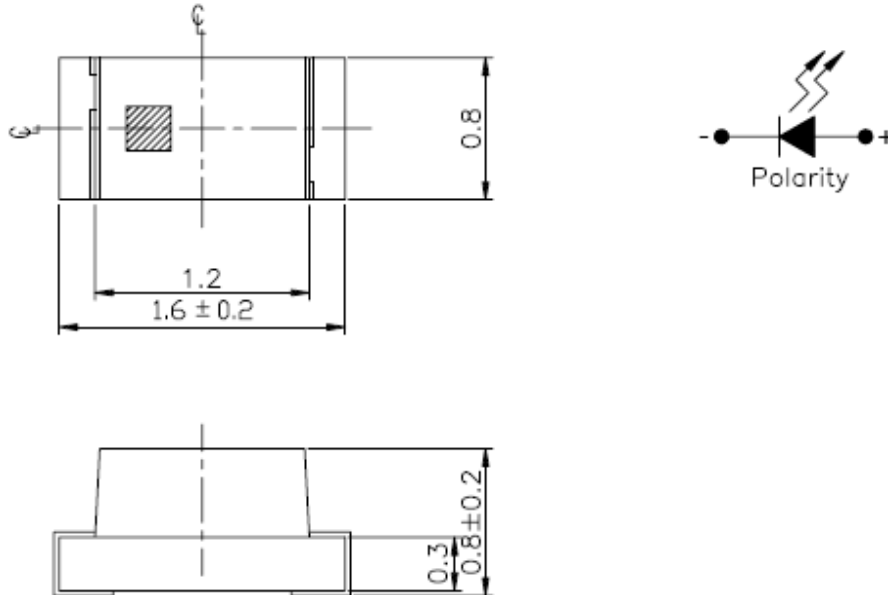
### Typical Electro-Optical Characteristics Curves (Ta = 25°C)



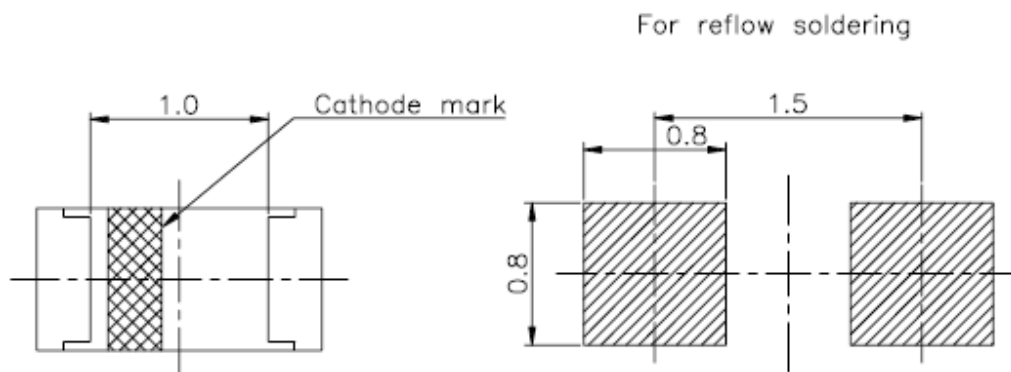
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## TSP1-BF1608H8-2528

### Package Outline Dimensions (Unit=mm)



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

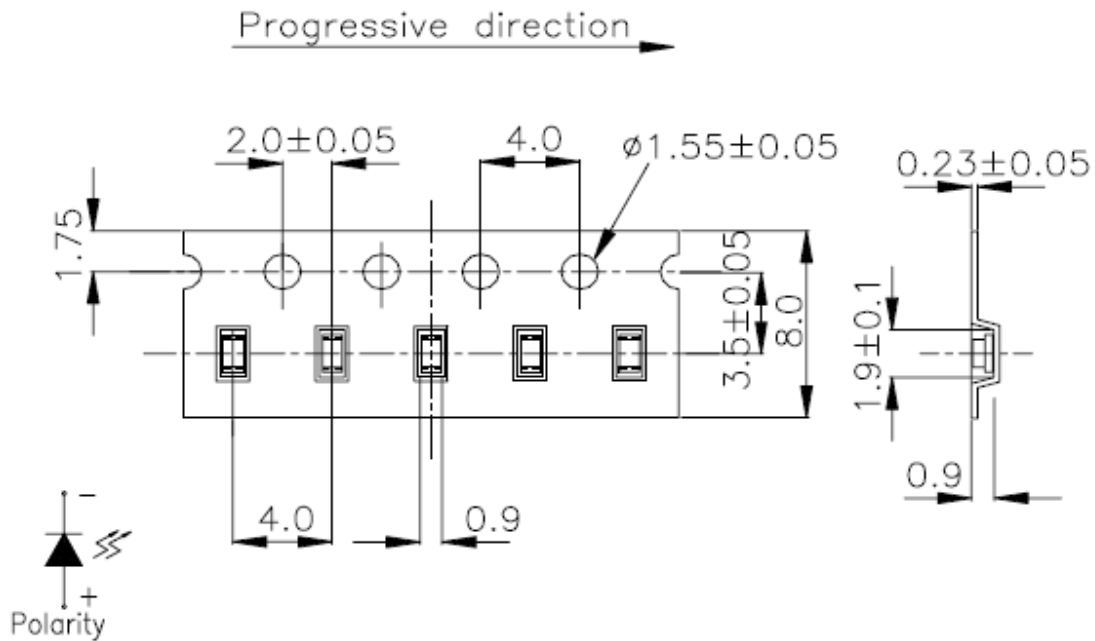


**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm, Unit = mm

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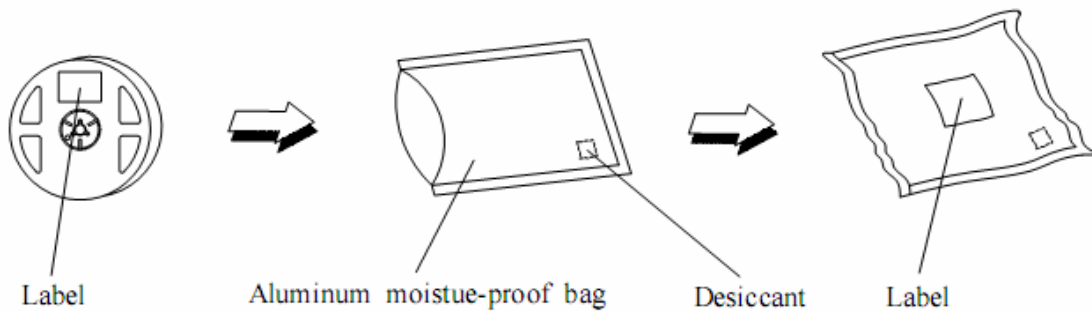
## TSP1-BF1608H8-2528

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



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

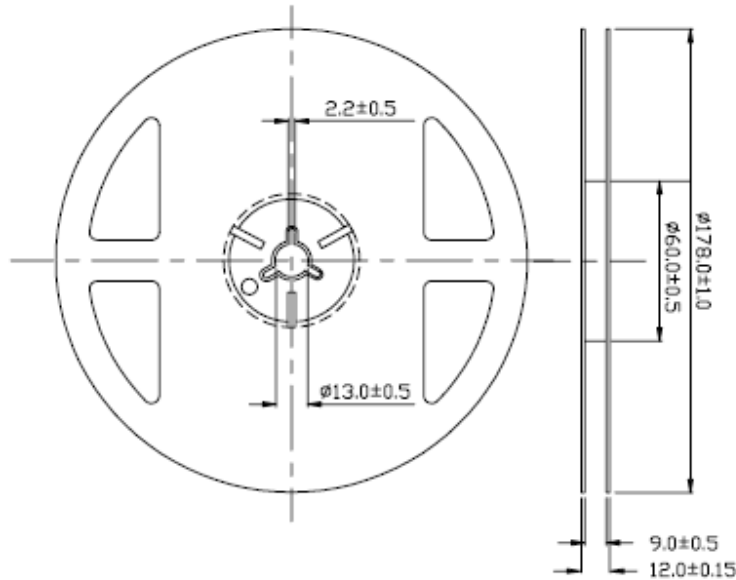
### Moisture Resistant Packaging



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### Reel Dimensions (Unit= mm):



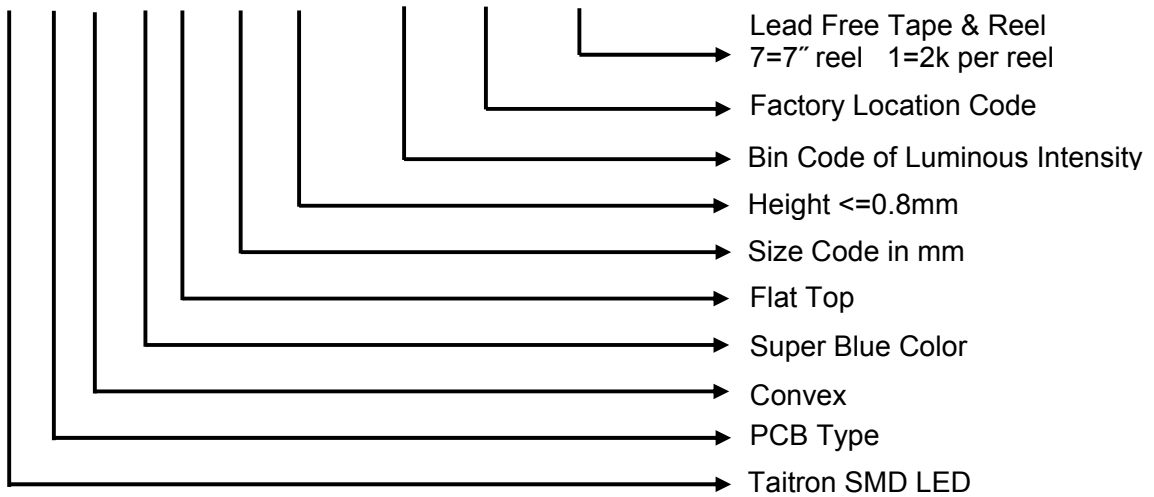
**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm.

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## TSP1-BF1608H8-2528

### Ordering Information

TS P 1- B F 1608 H8 - 2528- 92-TR71



### Label Explanation

**CAT:** Luminous Intensity Rank

**HUE:** Dom. Wavelength Rank

**REF:** Forward Voltage Rank



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## TSP1-BF1608H8-2528

### Bin Range of HUE

Groups	Bin Code	Min	Max	Unit	Condition
F	AA1	464	466	nm	IF=20mA
	AA2	466	468		
	AA3	468	470		
	AA4	470	472		

### Bin Range of Luminous Intensity

Bin Code	Min	Max	Unit	Condition
25	30.5	35.0	mcd	IF=20mA
26	35.0	40.5		
27	40.5	46.5		
28	46.5	53.5		

### Bin Range of Forward Voltage

Groups	Bin Code	Min	Max	Unit	Condition
E	5	2.75	3.05	V	IF=20mA
	6	3.05	3.35		
	7	3.35	3.65		

**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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## How to contact us

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