

## Top View with Super Blue LED

### Features

- PLCC-2 package.
- White package
- Optical indicator and colorless clear window.
- Wide viewing angle.
- Suitable for vapor-phase reflow, Infrared reflow and wave solder processes.
- Computable with automatic placement equipment.
- RoHS



**M3227**



### Descriptions

- This series is available in soft orange, green, blue and yellow.  
Due to the package design, the optimized light coupling by inter reflector.
- The feature makes the ideal for light pipe application. The low current requirement makes this device ideal for portable equipment or any other application where power is at a premium.

### Applications

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

### Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TSRJ-BT3227B9	InGaN	Super Blue	Water Clear

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

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Peak Forward Current (Duty 1/10@1KHz)	IFP	100	mA
Power Dissipation	Pd	110	mW
Electrostatic Discharge	ESD	150	V
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	Tsol	Reflow soldering: 260°C for 10 sec. Hand soldering: 350°C for 3 sec	

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

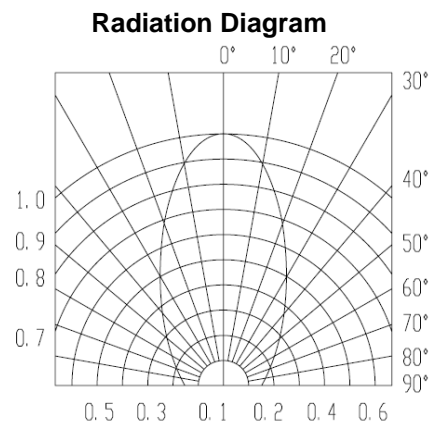
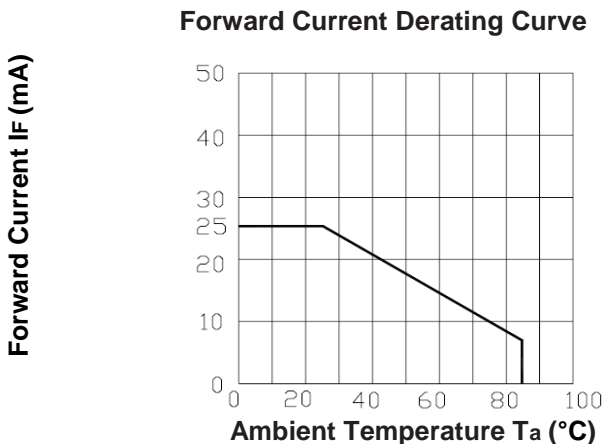
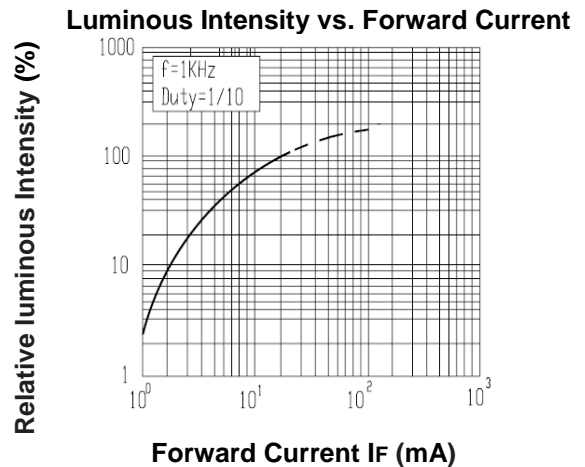
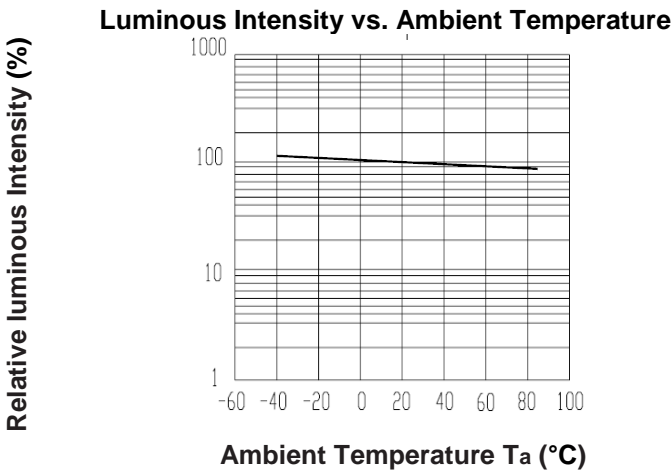
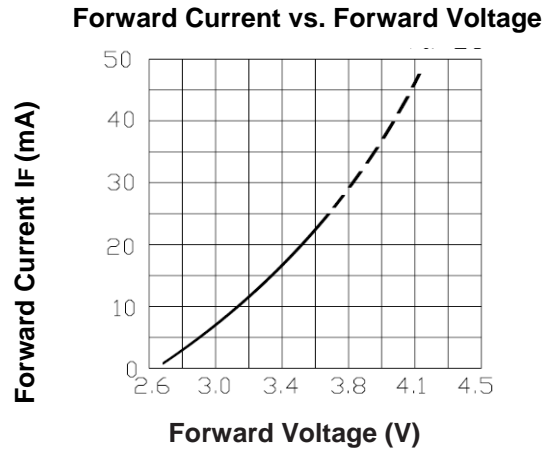
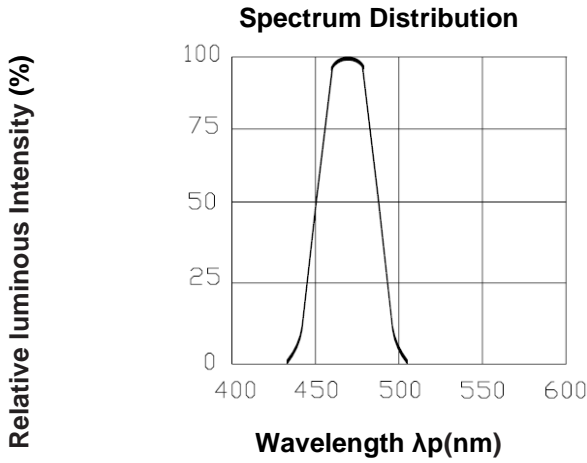
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	550	800	-----	mcd	IF=20mA
Dominant Wavelength	$\lambda_d$	-----	470	-----	nm	
Peak Wavelength	$\lambda_p$	-----	468	-----	nm	
Spectrum Radiation Bandwidth	$\Delta\lambda$	-----	35	-----	nm	
Viewing Angle	2 $\theta$ 1/2	-----	60	-----	deg	
Forward Voltage	VF	-----	3.50	4.30	V	
Reverse Current	IR	-----	-----	50	$\mu$ A	VR=5V

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

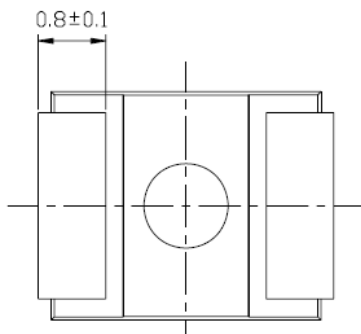
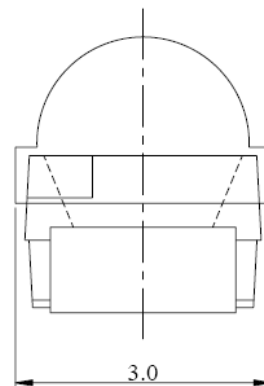
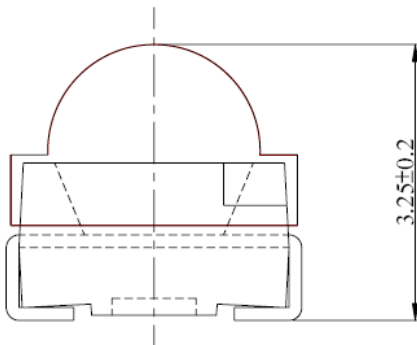
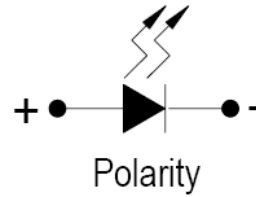
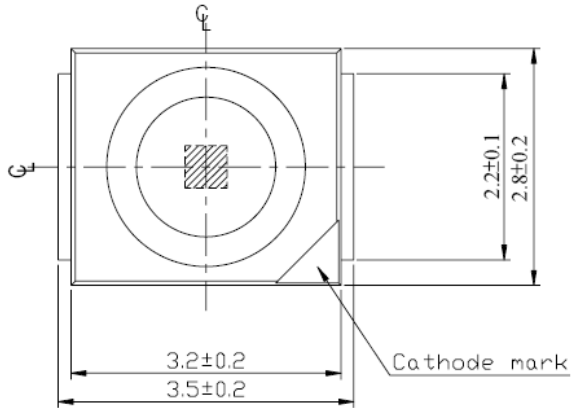
Tolerance of Dominant wavelength:  $\pm 1.0\text{nm}$

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

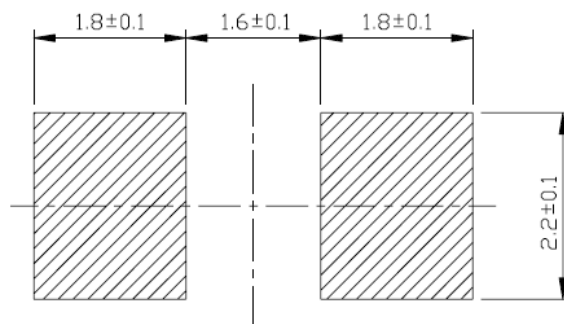
### Typical Electro-Optical Characteristics Curves (Ta=25°C)



### Package Outline Dimensions (Unit=mm)

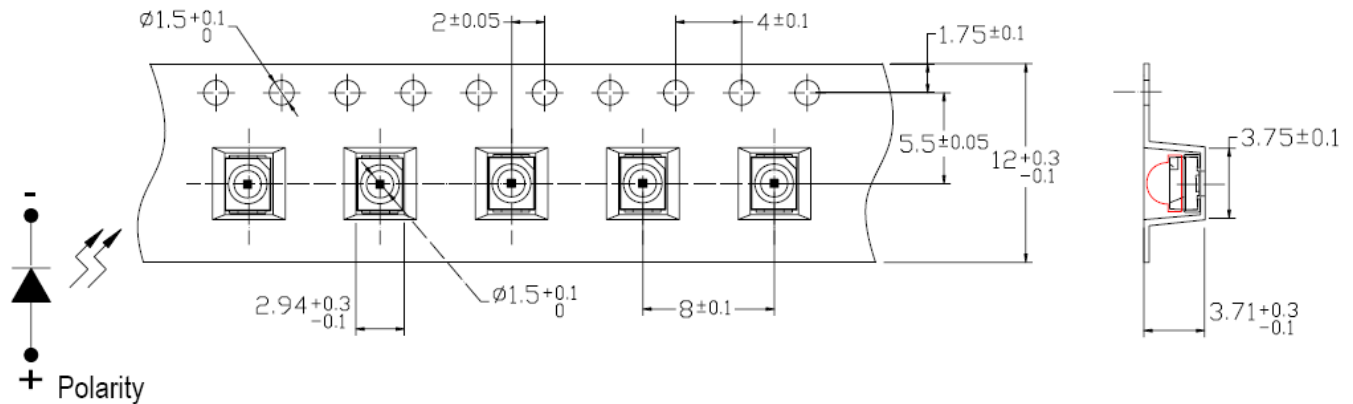


For reflow soldering (propose)



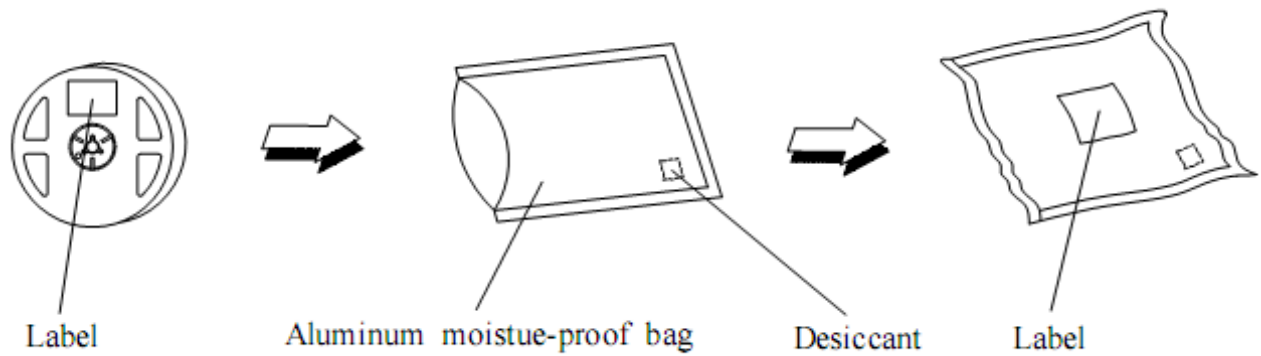
**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm.

### Carrier Tape Dimensions (Unit=mm): Loaded quantity 500pcs per reel

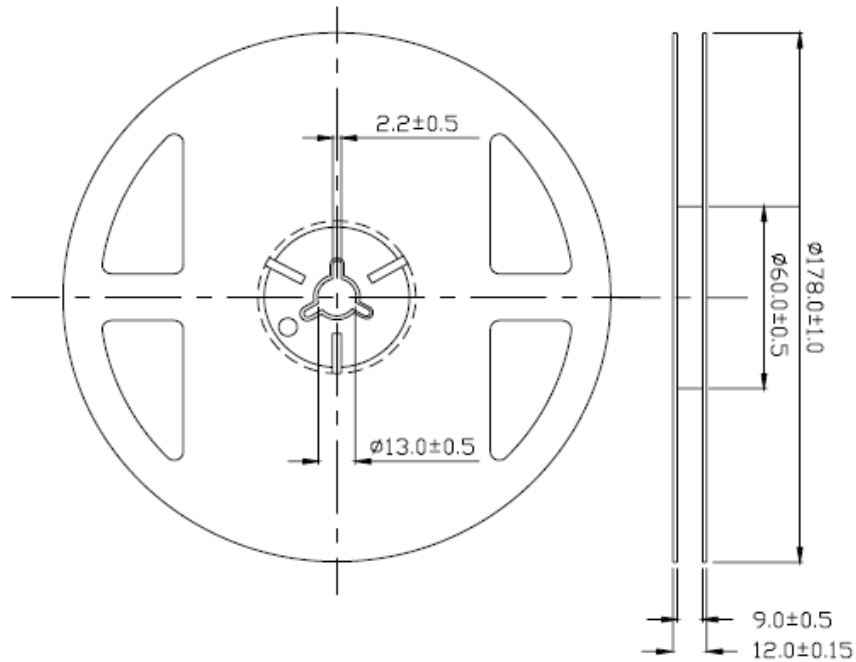


**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm.

### Moisture Resistant Packaging



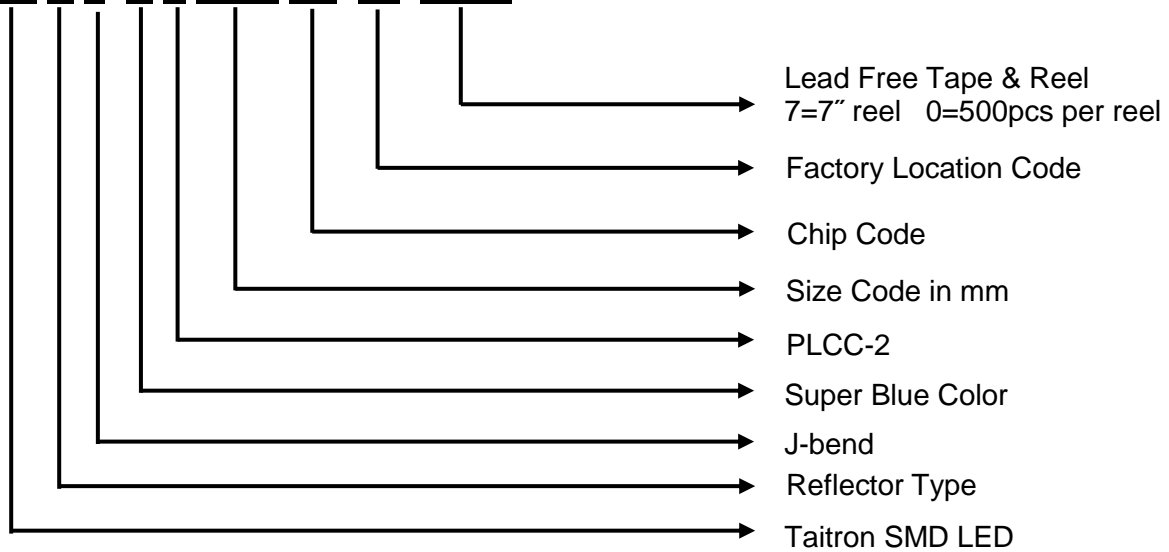
### Reel Dimensions (Unit=mm):



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

### Ordering Information

TS R J-B T 3227 B9-92-TR70



### Label Explanation

CAT: Luminous Intensity Rank

HUE: Dominant Wavelength Rank

REF: Forward Voltage Rank

CPN:  
P/N:  
QTY :  
LOT NO :

CAT:  
HUE:  
REF:

RoHS



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