# 0603 SMD TYPE LED

VGG | lighting:theway

VAOL-S6GT4

#### Features

- Fit automatic placement equipment.
- Fit Compatible with infrared and vapor phase reflow solder process.

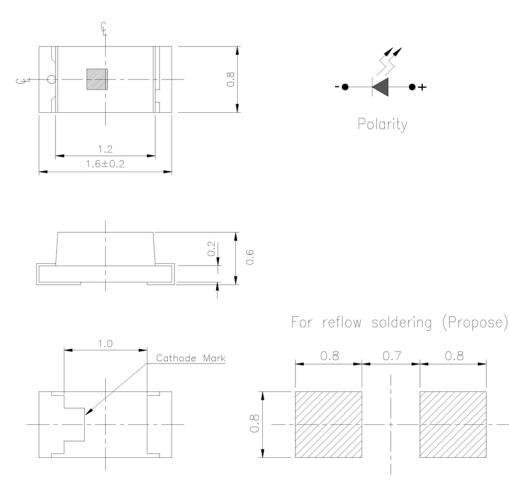
OPTOELECTRONICS

- Pb-free.
- RoHS compliant.

#### Descriptions

- For higher packing density .
- For minature applications .
- Water clear lens .
- Chip material : AlGaInP .
- Emitting color : Yellow Green .

#### **Package Outline Dimensions**



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

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# Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	$\mathbf{I}_{\mathbf{F}}$	25	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40~ +90	°C
Soldering Temperature	Tsol	260 (for 5 second)	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	If p	60	mA

# Electro-Optical Characteristics (Ta=25 $^\circ\!C$ )

Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	Iv	14.5		57.0	mcd	
Viewing Angle	2 <i>θ</i> 1/2		120		deg	
Peak Wavelength	λp		575		nm	
Dominant Wavelength	λd	570.0		574.5	nm	IF=20mA
Spectrum Radiation Bandwidth	$ riangle \lambda$		20		nm	
Forward Voltage	VF	1.75		2.35	V	
Reverse Current	Ir			10	$\mu A$	V <sub>R</sub> =5V





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## **Bin Range Of Luminous**

Bin	Min	Max	Unit	Condition
1	14.5	22.5		
2	22.5	36.0	mcd	IF=20mA
3	36.0	57.0		

## Bin Range Of Dom. Wavelength

Bin	Min	Max	Unit	Condition
1	570.0	571.5		
2	571.5	573.0	nm	IF=20mA
3	573.0	574.5		

## **Bin Range Of Forward Voltage**

Bin	Min	Max	Unit	Condition
1	1.75	1.95		
2	1.95	2.15	V	IF=20mA
3	2.15	2.35		

Specific binning requirements- please contact our home office

#### Notes:

1.Tolerance of Luminous Intensity ±10%

2.Tolerance of Dominant Wavelength  $\pm$  1nm

3.Tolerance of Forward Voltage ±0.1V



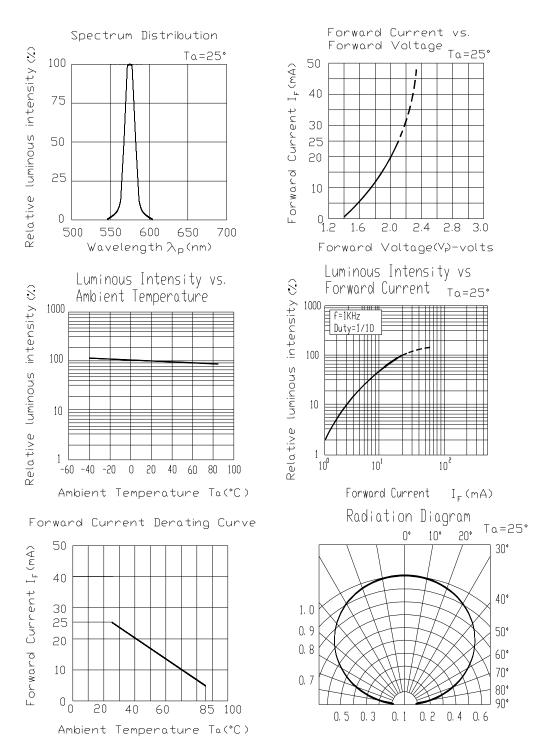




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## **Typical Electro-Optical Characteristics**

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🦉 RoH

ISO 9001

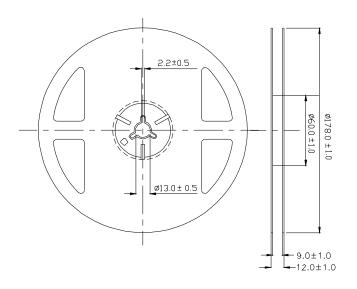
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## **Reel Dimensions**



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

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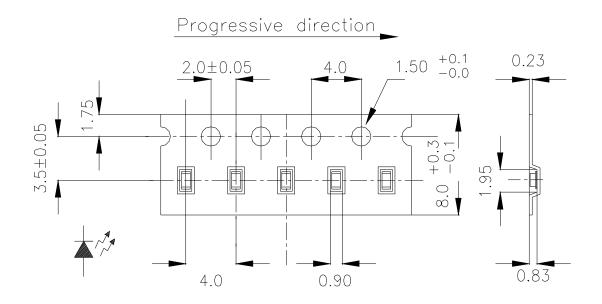




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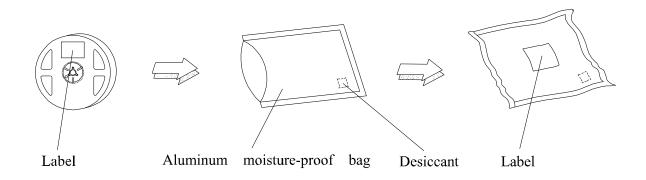


# **Carrier Tape Dimensions: Loaded quantity 3000 PCS per reel**



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

## **Moisture Resistant Packaging**





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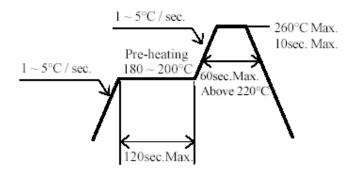
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#### Soldering Condition

1.Pb-free solder temperature profile



- 2.Reflow soldering should not be done more than two times.
- 3 When soldering, do not put stress on the LEDs during heating.
- 4 After soldering, do not warp the circuit board.

#### Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than  $350^{\circ}$ C for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

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