VCC | OPTOELECTRONICS
lighting:theway

0402 SMD TYPE LED

VAOL-S4GT4

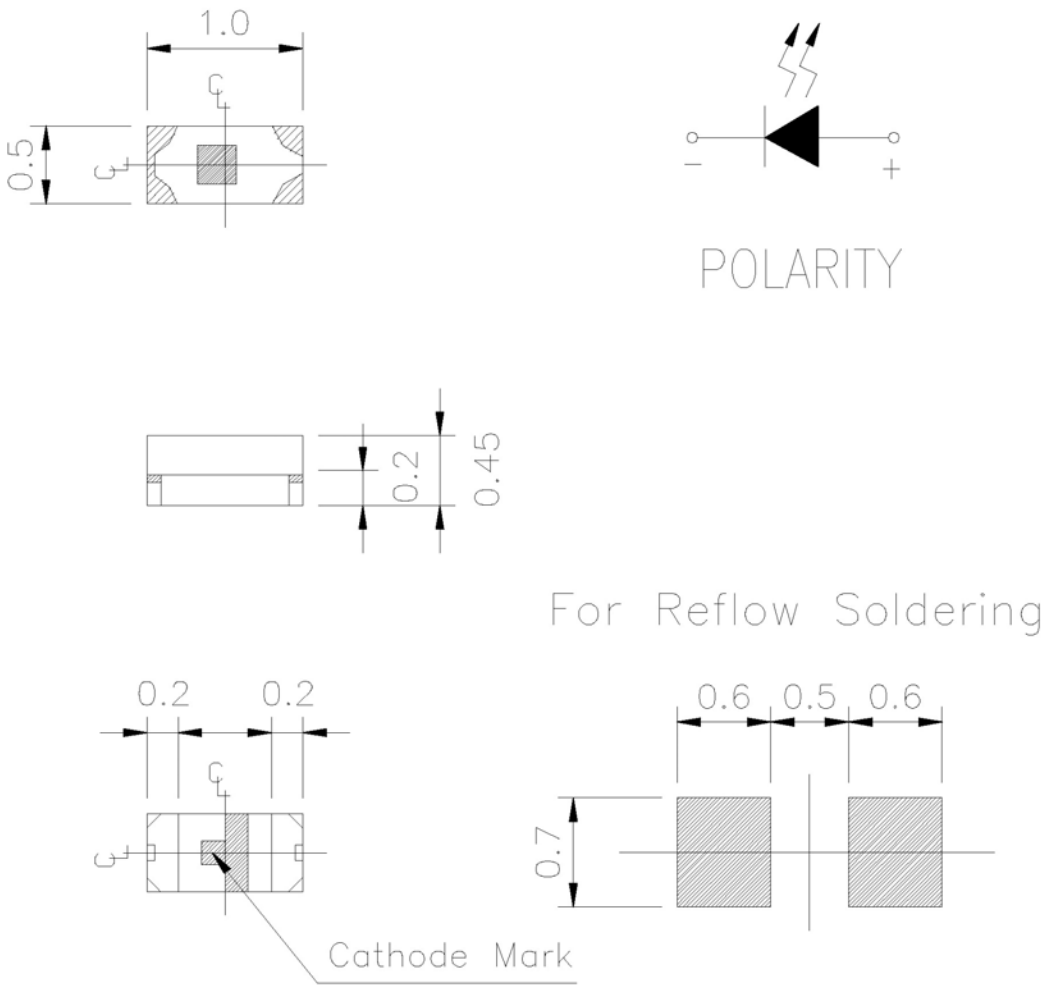
Features

- Fit automatic placement equipment.
- Fit Compatible with infrared and vapor phase reflow solder process.
- 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 ±0.1mm ,Unit = mm

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RoHS
ISO 9001 Registered

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	25	mA
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +90	℃
Soldering Temperature	Tsol	260 (for 5 second)	℃
Electrostatic Discharge (HBM)	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	60	mA
Soldering Temperature	Tsol	Reflow Soldering : 260 ℃ for 10 sec. Hand Soldering : 350 ℃ for 3 sec.	

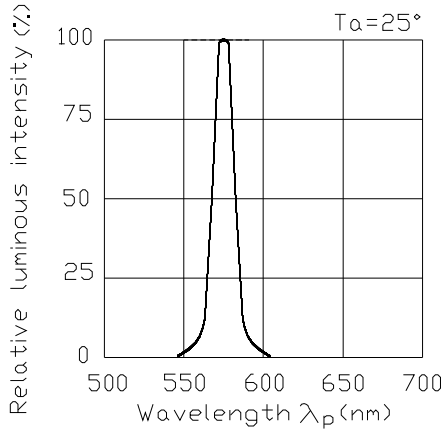
Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	*Chip Rank	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	E1	10	15	-----	mcd	I_F=20mA
		E2	20	25	-----		
		E3	30	35	-----		
		E4	40	45	-----		
Viewing Angle θ	2 1/2	-----	-----	120	-----	deg	
Peak Wavelength	λ p	-----	-----	575	-----	nm	
Dominant Wavelength	λ d	-----	-----	573	-----	nm	
Spectrum Radiation Bandwidth	$\triangle\lambda$	-----	-----	20	-----	nm	
Forward Voltage	V_F	-----	1.7	2.0	2.4	V	
Reverse Current	I_R	-----	-----	-----	10	μA	V_R=5V

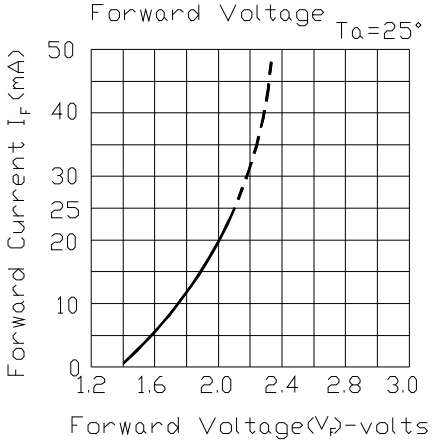
Specific binning requirements- please contact our home office

Typical Electro-Optical Characteristics Curves

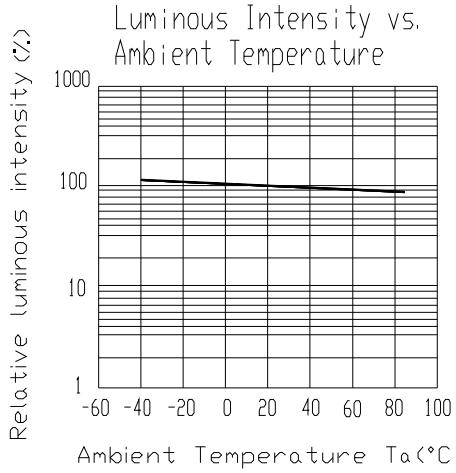
Spectrum Distribution



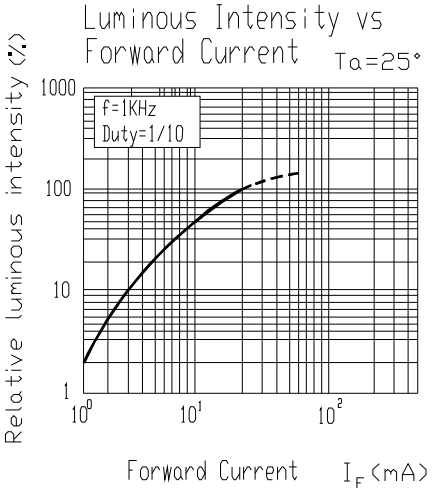
Forward Current vs. Forward Voltage



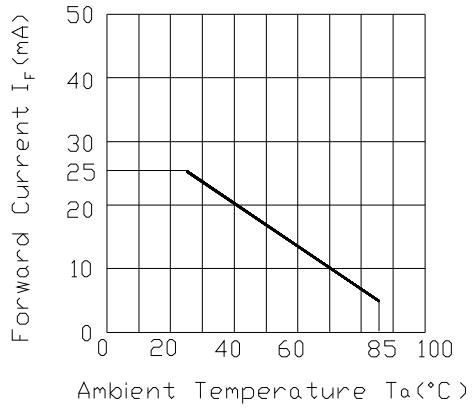
Luminous Intensity vs. Ambient Temperature



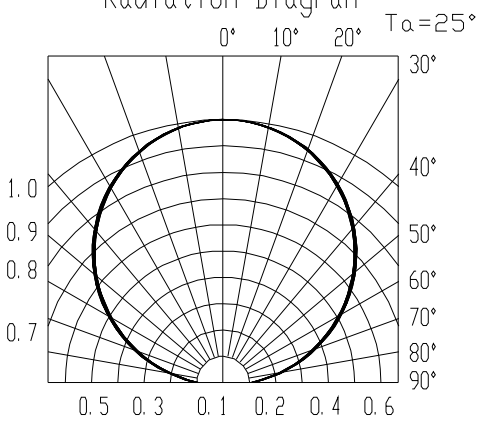
Luminous Intensity vs Forward Current



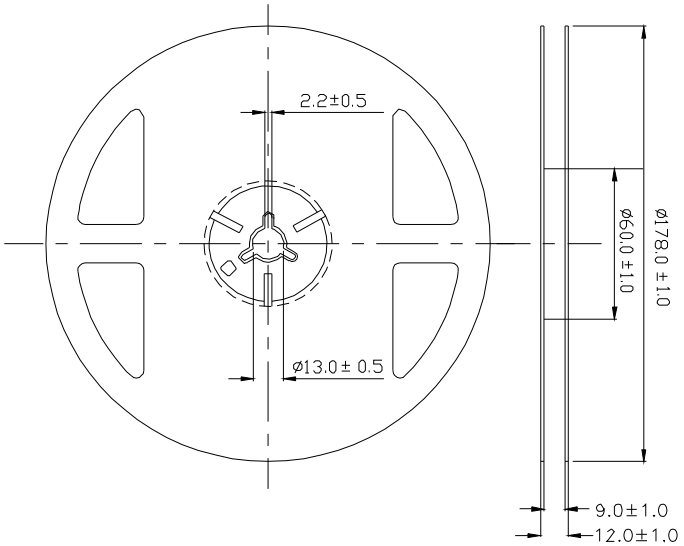
Forward Current Derating Curve



Radiation Diagram

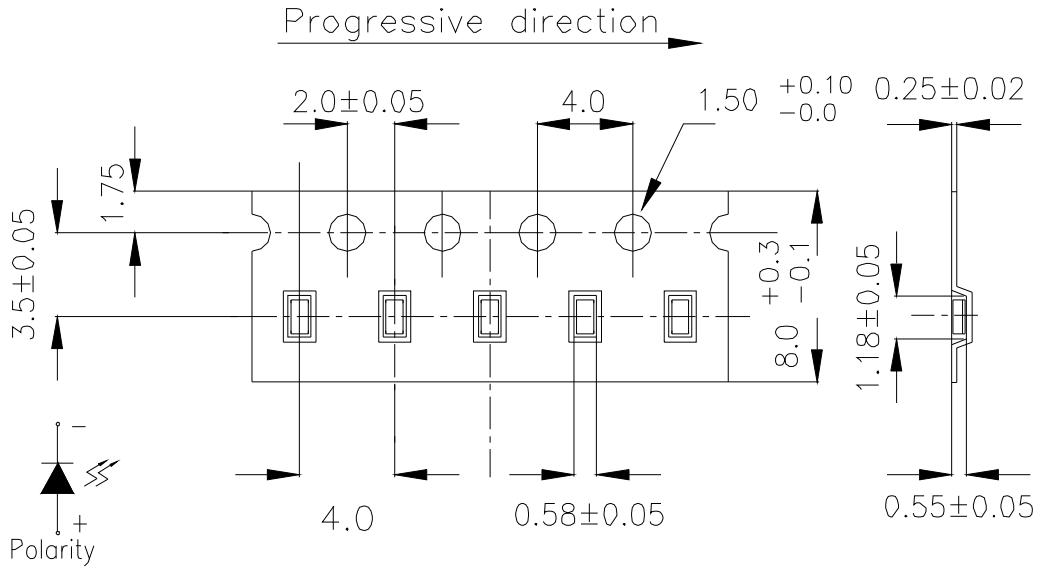


Reel Dimensions



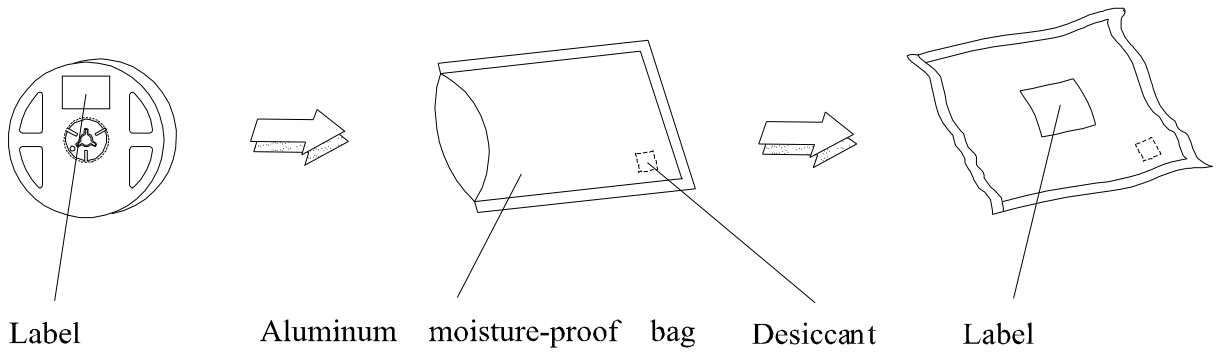
Note: The tolerances unless mentioned is ±0.1mm ,Unit = mm

Carrier Tape Dimensions: Loaded quantity 3000 PCS per reel



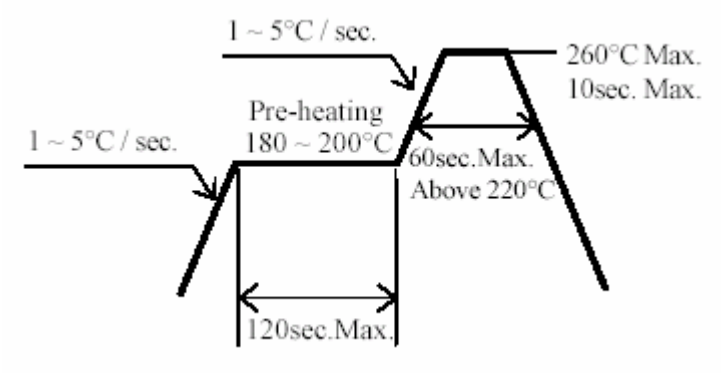
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Moisture Resistant Packaging



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℃ 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.