VAOL-S2SB4

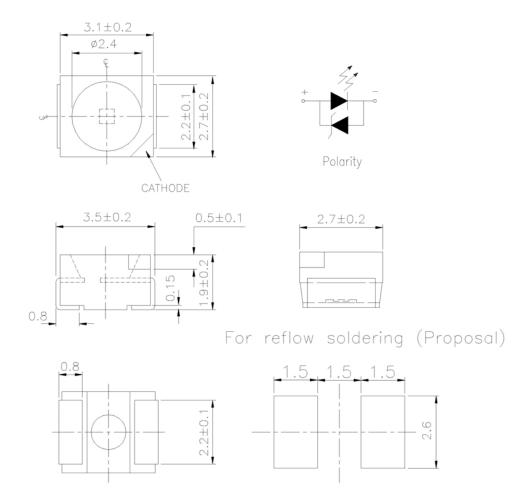
Features

- Fit automatic placement equipment.
- Fit Compatible with vapor-phase reflow, Infrared reflow and wave solder processes.
- White package.
- Pb-free.
- RoHS compliant.

Descriptions

- For higher packing density .
- For minature applications .
- Water clear lens .
- Chip material: InGaN.
- Emitting color: Blue.

Package Outline Dimensions



Notes: Tolerances Unless Dimension ± 0.1 mm, Unit = mm







Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_{F}	25	mA
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	100	mA
Power Dissipation	Pd	110	mW
Electrostatic Discharge(HBM)	ESD	2000	V
Operating Temperature	Topr	-40 ~ +85	$^{\circ}\mathbb{C}$
Storage Temperature	Tstg	-40 ~ +90	$^{\circ}\! \mathbb{C}$
Soldering Temperature	Tsol	Reflow Soldering: 260 Hand Soldering: 350	°C for 10 sec °C for 3 sec.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	Iv	90		225	mcd	I _F =20mA
Viewing Angle	2 <i>θ</i> 1/2		120		deg	I _F =20mA
Peak Wavelength	λр		468		nm	I _F =20mA
Dominant Wavelength	λd	464.0		472.0	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ		35		nm	I _F =20mA
Forward Voltage	V_{F}	2.7		3.5	V	I _F =20mA
Reverse Current	I_R			50	μ A	$V_R=5V$

Specific binning requirements- please contact our home office

Notes:

1. Tolerance of Luminous Intensity ±10%

2. Tolerance of Dominant Wavelength \pm 1nm







Bin Range Of Dominant Wavelength

Group	BinCode	Min.	Max.	Unit	Condition
F AA1 AA2 AA3 AA4	AA1	464	466	nm I _F =20m	I - 20 A
	AA2	466	468		
	AA3	468	470		IF—ZUMA
	AA4	470	472		

Bin Range Of Luminous Intensity

Bin	Min	Max	Unit	Condition
Q2	90	112		I _F =20mA
R1	112	140	m o d	
R2	140	180	mcd	
S1	180	225		

Bin Range Of Forward Voltage

Group	Bin Code	Min.	Max.	Unit	Condition	
F 12	10	2.7	2.9	V		
	11	2.9	3.1		I _F =20mA	
	12	3.1	3.3			
	12	3.3	3.5			

Notes:

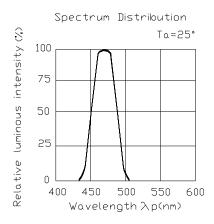
- 1.Tolerance of Luminous Intensity ±10%
- 2. Tolerance of Dominant Wavelength \pm 1nm
- 3.Tolerance of Forward Voltage ±0.1V

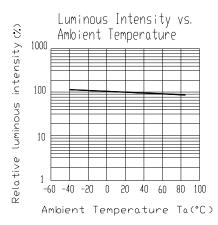


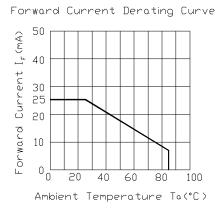


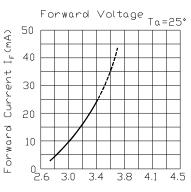


Typical Electro-Optical Characteristics Curves

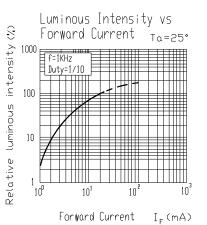


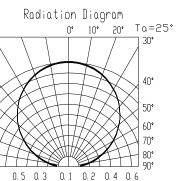






Forward Voltage(V)-volts





1.0

0. 9

0.8

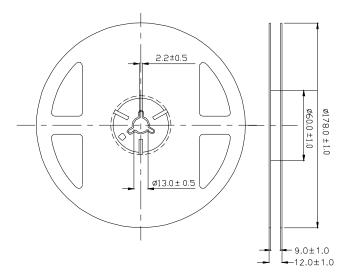
0.7







Reel Dimensions



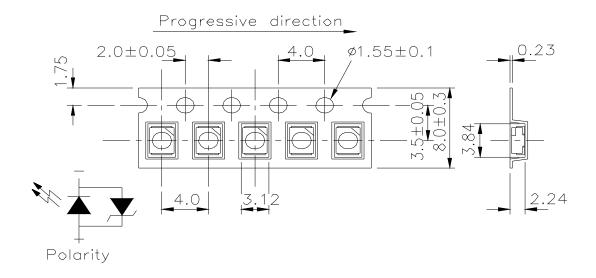
Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm





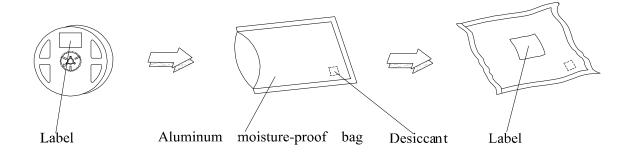


Carrier Tape Dimensions: Loaded quantity 2000 PCS per reel.



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

Moisture Resistant Packaging

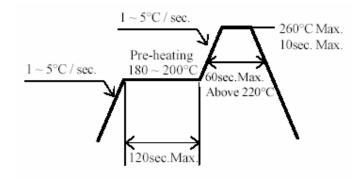






Soldering Condition

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°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.



