



2.0x1.25mm SMD CHIP LED LAMP



Features

- 2.0mmx1.25mm SMT LED, 0.45mm max. thickness.
- Bi -color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- \bullet Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.





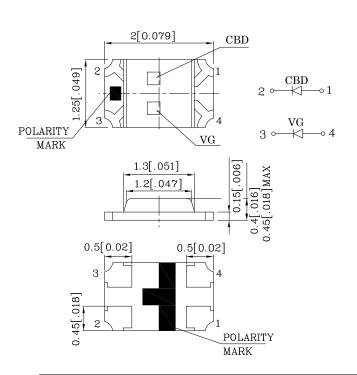


ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)		CBD (InGaN)	VG (AlGaInP)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	150	150	mA
Power Dissipation	PD	120	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		C

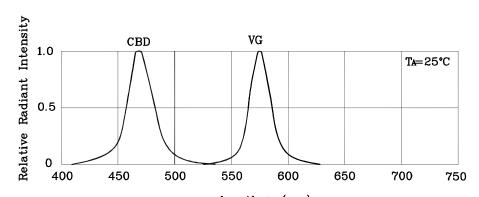


Operating Characteristics (TA=25°C)		CBD (InGaN)	VG (AlGaInP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	2.1	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	2.5	V
Reverse Current (Max.) (VR=5V)	IR	50	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λΡ	468	574	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	470	570	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	25	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	100	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XZCBDVG54W-4 —	Blue	InGaN	- Water Clear	40	79	468	120°
	Green	AlGaInP		30	54	574	

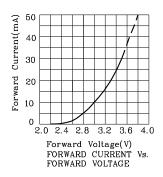
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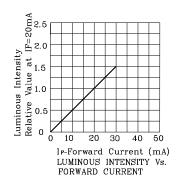
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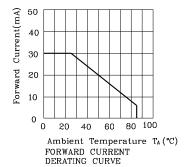


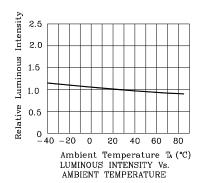
wavelength λ (nm) RELATIVE INTENSITY Vs. WAVELENGTH

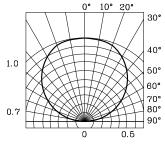
♦ CBD











SPATIAL DISTRIBUTION

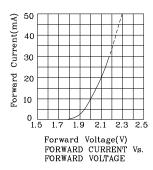


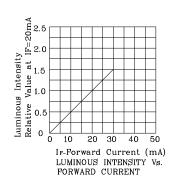
Part Number: XZCBDVG54W-4

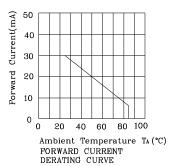
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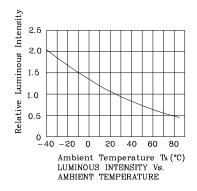


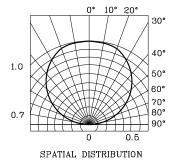
♦ VG







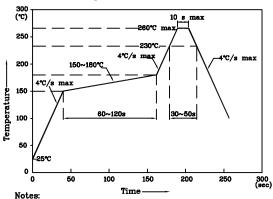




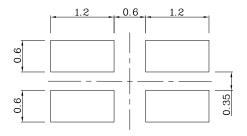
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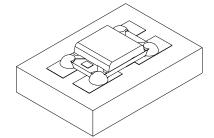
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



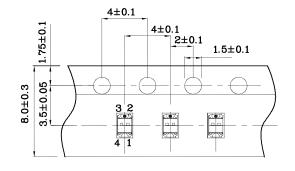
- Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions
- **❖** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)
- ❖ The device has a single mounting surface. The device must be mounted according to the specifications.

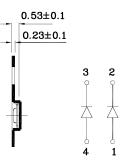




❖ Tape Specification (Units:mm)

TAPE





Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

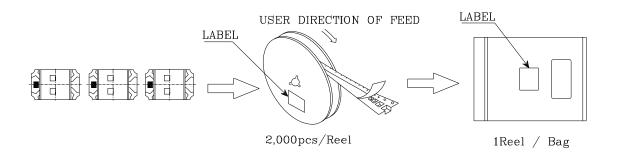


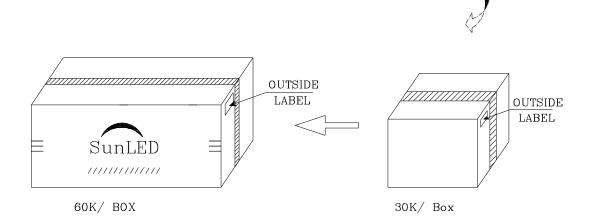
Part Number: XZCBDVG54W-4

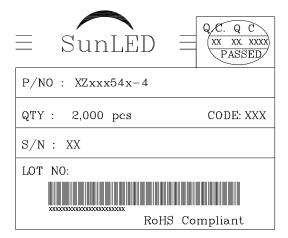
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PACKING & LABEL SPECIFICATIONS

XZCBDVG54W-4







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