

Features

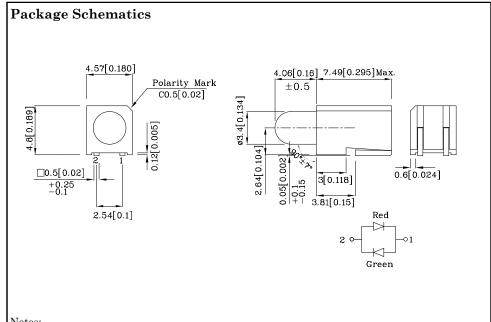
- Housing UL rating:94V-0
- Housing material: PPA
- Black casing provides superior contrast
- Reliable & robust
- Custom color combinations available
- RoHS Compliant







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		Red (AlGaInP)	Green (AlGaInP)	Unit
Forward Current	I_{F}	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	150	mA
Power Dissipation	P_{D}	75	75	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~		

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T _A =25°C)		Red (AlGaInP)	Green (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =2mA)	V_{F}	1.75	1.9	V
Forward Voltage (Max.) $(I_F=2mA)$	V_{F}	2.2	2.3	V
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =2mA)	λΡ	645*	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =2mA)	λD	630*	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =2mA)	Δλ	28	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous\ Intensity \\ CIE127\text{-}2007^*\ (I_F\text{=}2\text{mA}) \\ mcd \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XPJ1CMDKVG41M ————	Red	AlGaInP	White Diffused	20 6*	49 14*	645*	70°
	Green	AlGaInP		2 2*	5 5*	574*	

^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

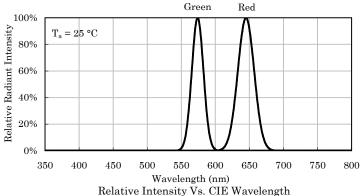
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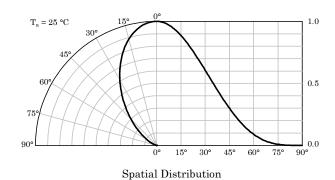




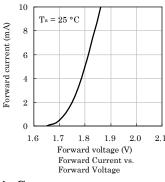


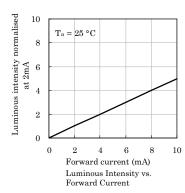


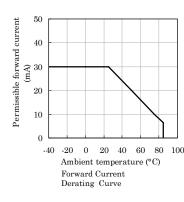


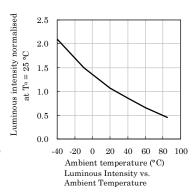


❖ Red

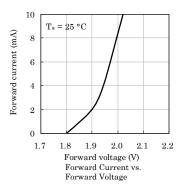


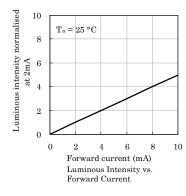


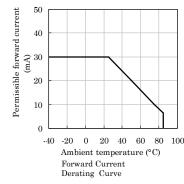


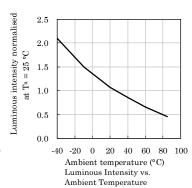


❖ Green

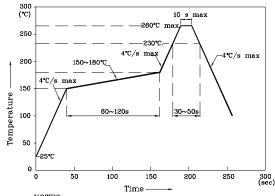








Reflow Soldering Profile for SMD Products (Pb-Free Components)



NOTES: 1. We recommend the reflow temperature $245^{\circ}C(+/-5^{\circ}C)$. The maximum soldering temperature should be limited to $260^{\circ}C$. 2. Don't cause stress to the epoxy resin while it is exposed

to high temperature. 3. No more than once.

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:

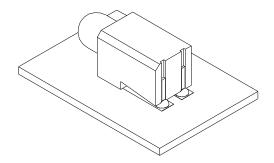
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

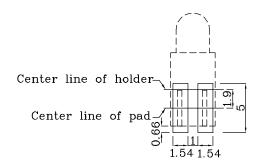




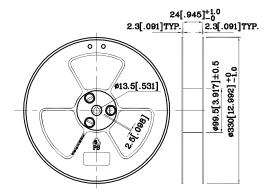
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



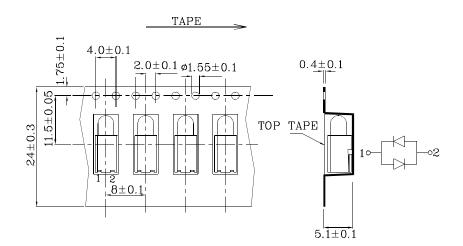
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



* Reel Dimension



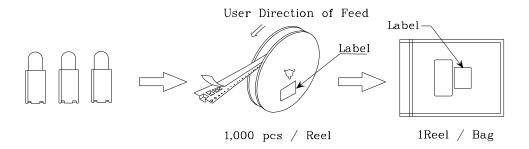
❖ Tape Specification (Units:mm)

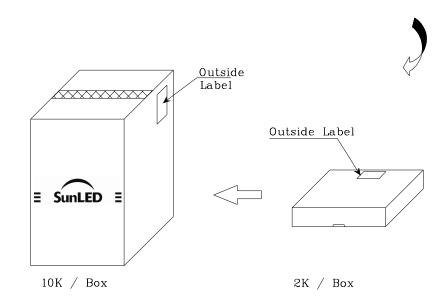


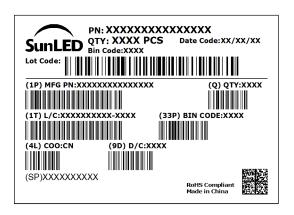




PACKING & LABEL SPECIFICATIONS







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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
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