



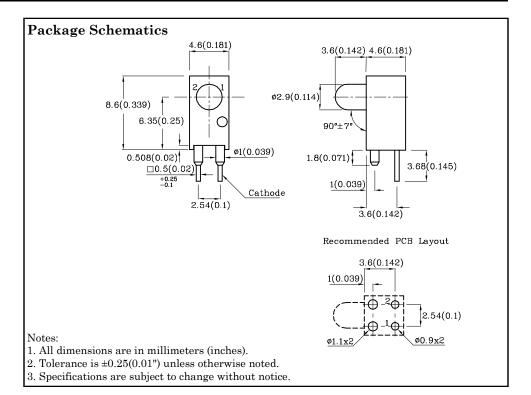
Features

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable & robust
- Custom color combinations available
- RoHS Compliant

Dec 02,2020







Absolute Maximum Ratings (T _A =25°C)		Red (GaAsP/GaP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	I_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	160	mA		
Power Dissipation	P_D	75	mW		
Operating Temperature	T _A -40 ~ +85		$^{\circ}\mathrm{C}$		
Storage Temperature	Tstg	-40 ~ +85			
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

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)

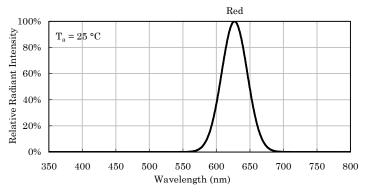
Operating Characteristics (T _A =25°C)		Red (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I _F =10mA)	V_{F}	1.9	V
Forward Voltage (Max.) (I _F =10mA)	V_{F}	2.3	V
Reverse Current (Max.) (V _R =5V)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	λР	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λD	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	Δλ	45	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous\ Intensity \\ CIE127\text{-}2007* \\ (I_F\text{=}10\text{mA}) \\ mcd \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XPV1LUR11D	Red	GaAsP/GaP	Red Diffused	12 10*	29 19*	627*	50°

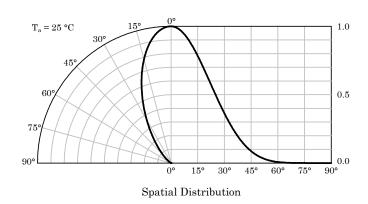
 $[\]hbox{*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.}$



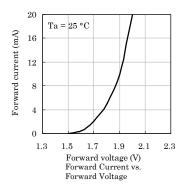


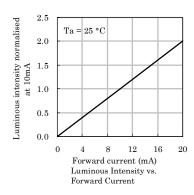


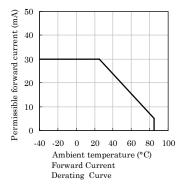
Relative Intensity Vs. CIE Wavelength

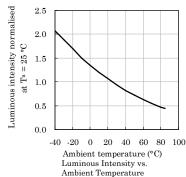


❖ Red

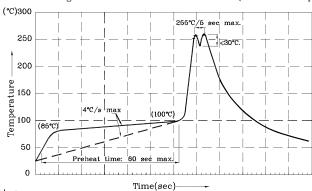








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes: 1.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C 2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above $85\,^\circ\text{C}.$ 4.Fixtures should not incur stress on the component when mounting and

during soldering process. 5.SAC 305 solder alloy is recommended.

6. No more than one wave soldering pass

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%

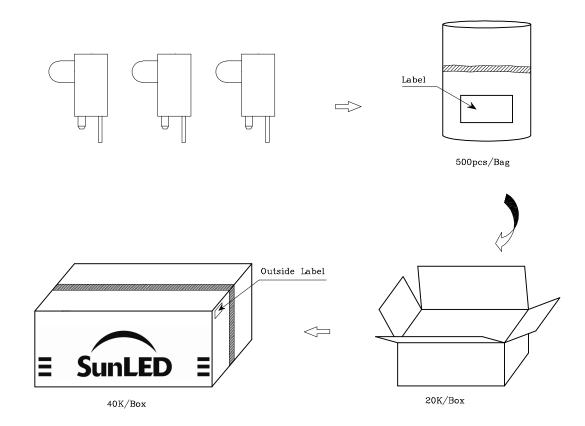
3. Forward Voltage: +/-0.1V

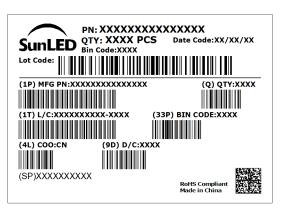
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





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XDSB8822 V2-X Layout: Maggie L.