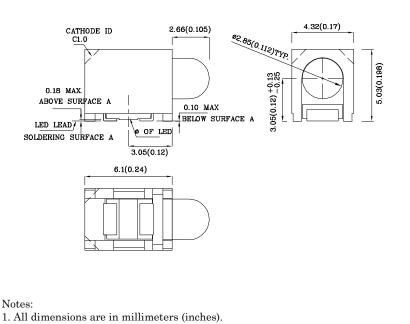


SINGLE LEVEL SURFACE MOUNT CBI

Features

- Surface mount type
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase solder processes
- \bullet Black case enhances contrast ratio
- \bullet Housing material meets UL94V-0 flamma bility rating
- \bullet Lens material meets UL94-HB flammability rating
- MSL (Moisture Sensitivity Level): 4
- RoHS compliant





2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.

Package Schematics

3. Specifications are subject to change without notice.

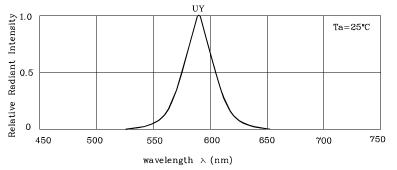
Absolute Maximum Ratings (T _A =25°C)		UY (GaAsP/GaP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	140	mA	
Power Dissipation	\mathbf{P}_{D}	75	mW	
Operating Temperature	TA	$-40 \sim +85$	°C	
Storage Temperature	Tstg	-40 ~ +100	-0	

Operating Characteristics (T _A =25°C)		UY (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I _F =10mA)	$V_{\rm F}$	1.95	V
Forward Voltage (Max.) (I _F =10mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (V _R =5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	λP	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	$ riangle\lambda$	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	20	pF

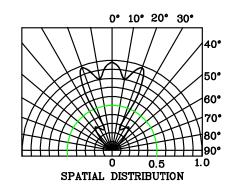
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =10mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XPR1ZUY45S	Yellow	GaAsP/GaP	Water Clear	3*	5*	590*	50°

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

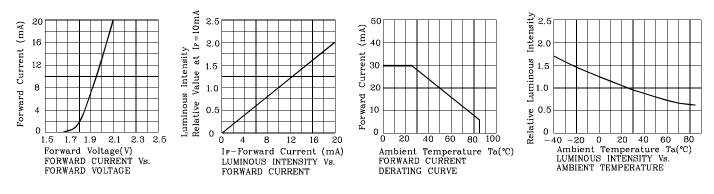




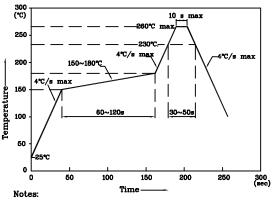
RELATIVE INTENSITY Vs. CIE WAVELENGTH



♦ UY



LED is recommended for reflow soldering and soldering profile is shown below.



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

1. Maximum soldering temperature should not exceed 260°C

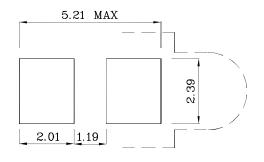
2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

high temperatures conditions

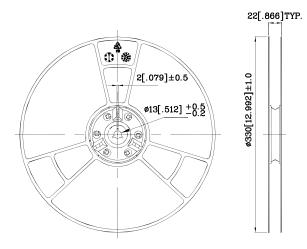


Recommended Soldering Pattern

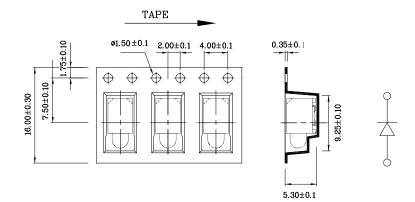
(Units : mm; Tolerance: ± 0.1)



Reel Dimension



Tape Specification (Units : mm)



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

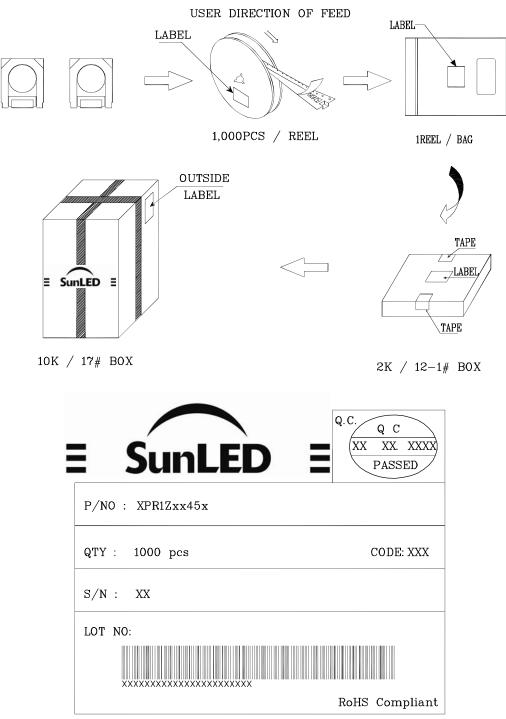
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 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.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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