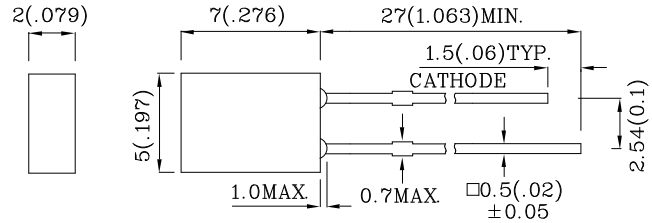


**Features**

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



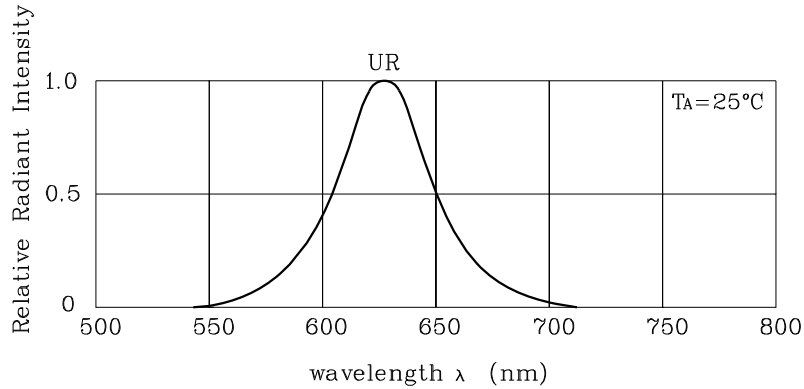
Notes:

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 (TA=25°C)		UR (GaAsP/GaP)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	160	mA
Power Dissipation	P <sub>T</sub>	75	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-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		

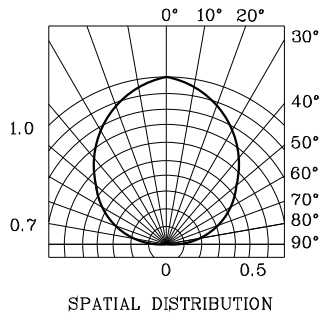
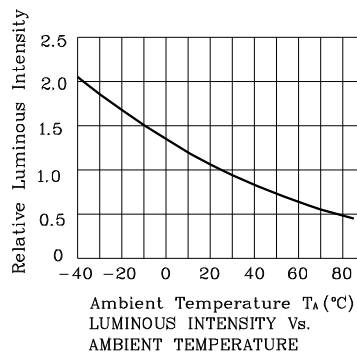
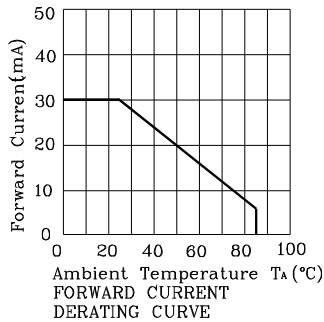
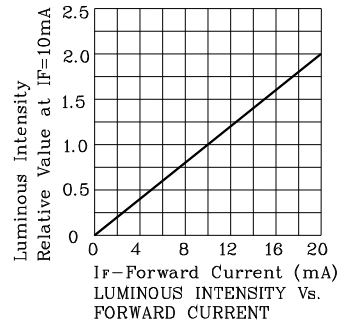
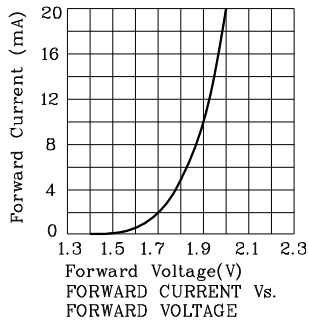
Operating Characteristics (TA=25°C)		UR (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	1.9	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =10mA)	λ P	627	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =10mA)	λ D	625	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	Δλ	45	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =10mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
SUR18D	Red	GaAsP/GaP	Red Diffused	3	4.8	627	110°

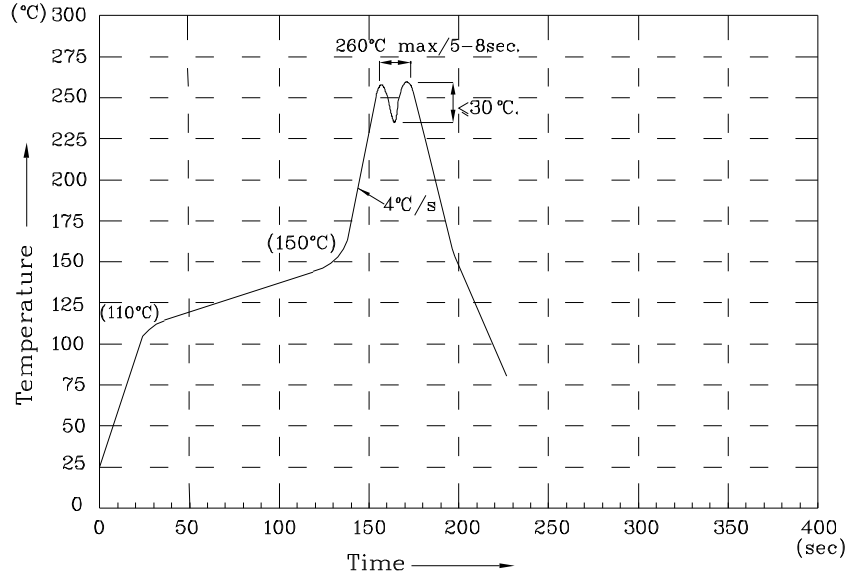


RELATIVE INTENSITY Vs. WAVELENGTH

❖ UR



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.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:

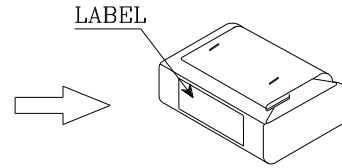
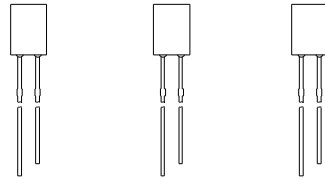
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

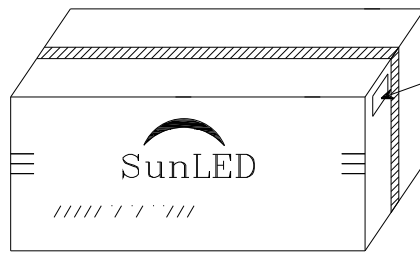


**PACKING & LABEL SPECIFICATIONS**

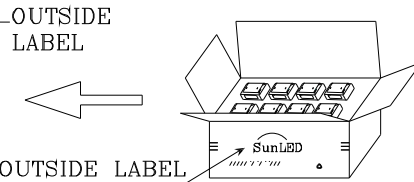
**SUR18D**




1000 PCS/ Bag



40K / BOX



20K / BOX




Q.C.

Q C

XX XX XX

PASSED

P/NO : Sxx18x	
QTY : 1000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	