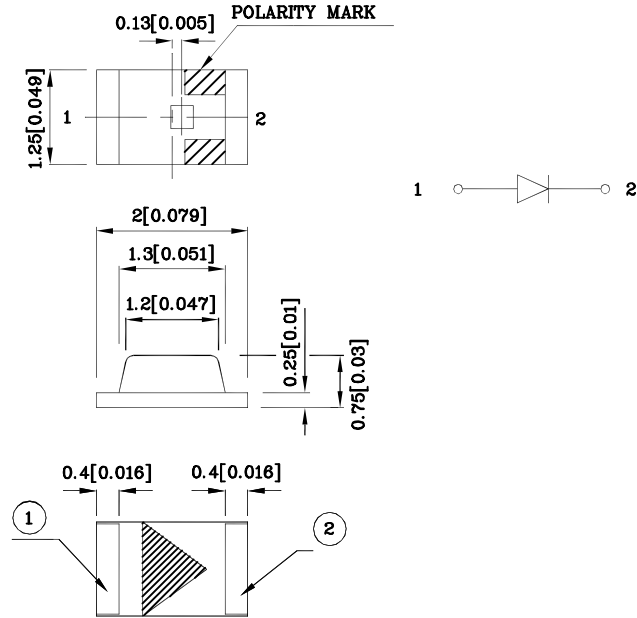


Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant



Package Schematics



Notes:

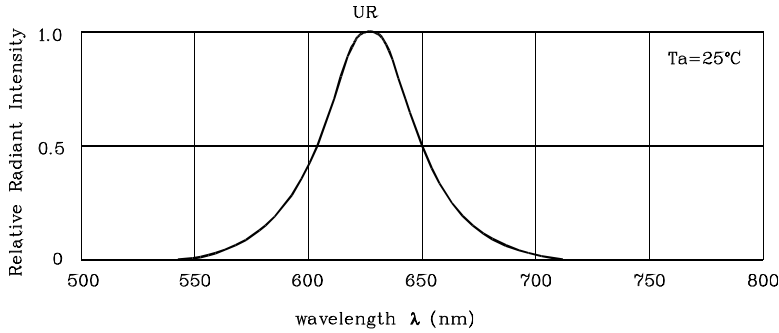
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		UR (GaAsP/ GaP)	Unit
Reverse Voltage	V_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	°C
Storage Temperature	T_{stg}	-40 ~ +85	

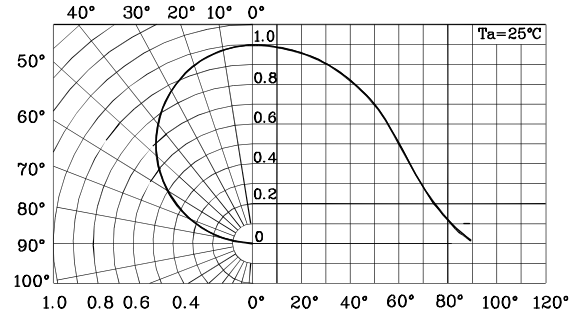
Operating Characteristics ($T_A=25^\circ\text{C}$)		UR (GaAsP/GaP)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	2	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=20\text{mA}$)	λ_P	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=20\text{mA}$)	λ_D	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$)	$\Delta\lambda$	45	nm
Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ($I_F=20\text{mA}$) mcd		Wavelength CIE127-2007* nm λ_P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZUR54W-1	Red	GaAsP/GaP	Water Clear	8 3*	14 7*	627*	120°

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

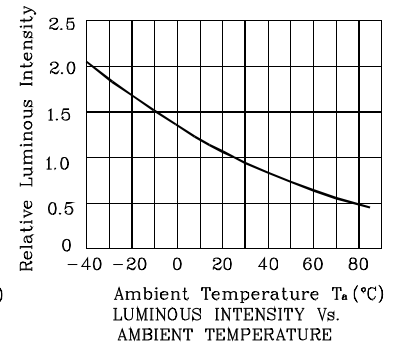
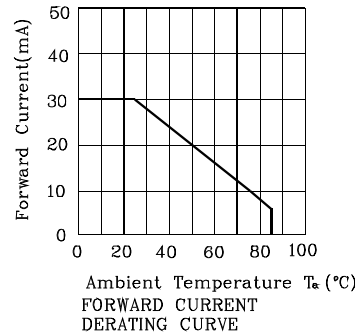
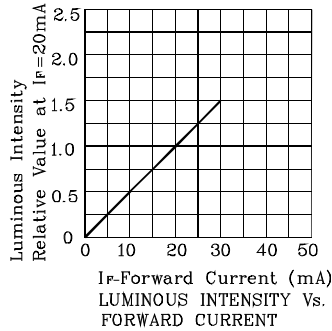
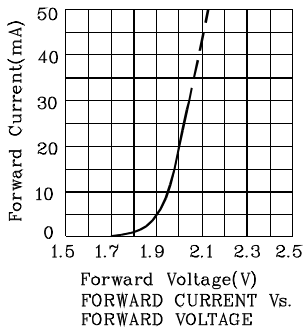


RELATIVE INTENSITY Vs. CIE WAVELENGTH



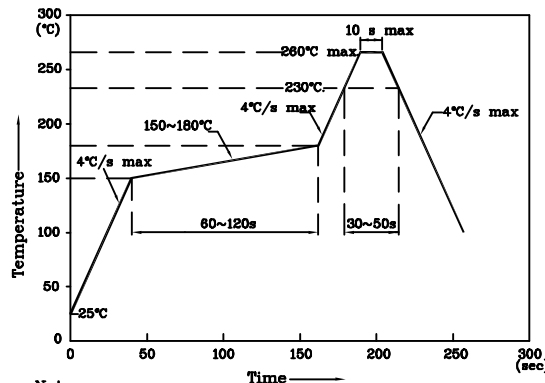
SPATIAL DISTRIBUTION

❖ UR



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

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



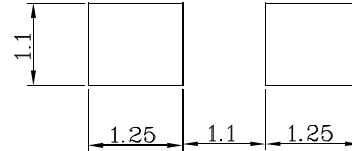
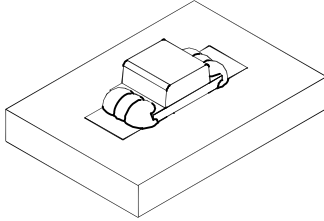
Notes:

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

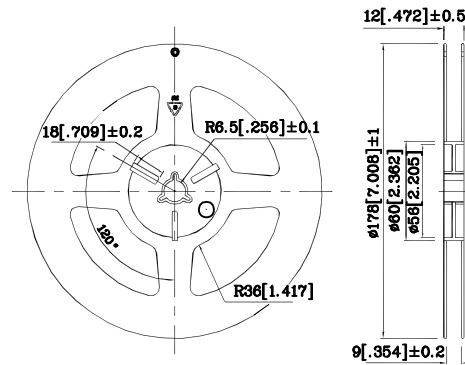


❖ The device has a single mounting surface.
The device must be mounted according to the specifications.

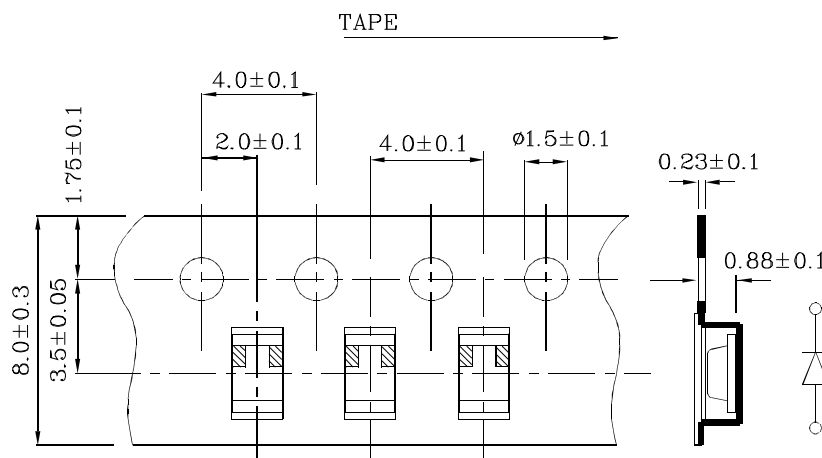
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ Tape Specification (Units : mm)



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: ± 1 nm
2. Luminous intensity / luminous flux: $\pm 15\%$
3. Forward Voltage: ± 0.1 V

Note: Accuracy may depend on the sorting parameters.

