

### Features

- High current operation for greater luminous output
- Low Power Consumption and thermal resistance
- Can be used with automatic insertion equipment
- RoHS Compliant



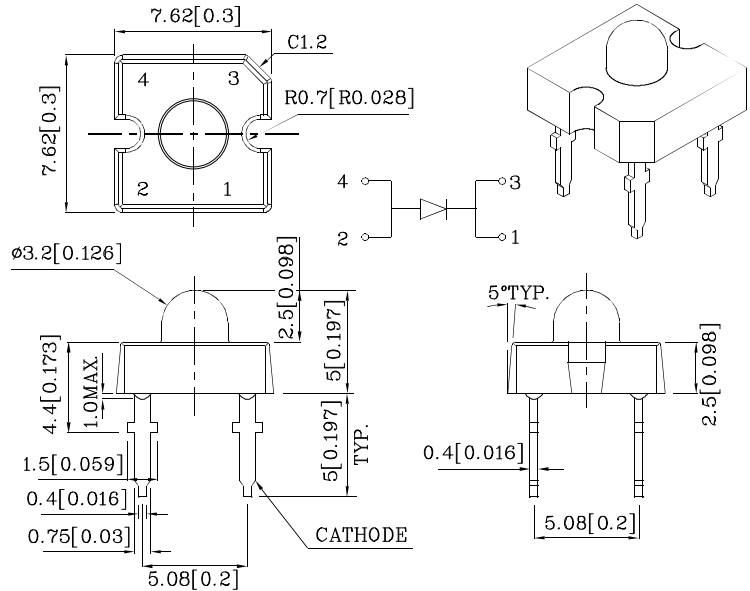
### Benefits:

- Rugged design allows for easy maintenance
- Robust package for optimum reliability

### Typical Applications:

- Automotive side markers
- Gaming and entertainment lighting
- Signs and road hazard indicators

### Package Schematics



#### 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 ( $T_A=25^\circ\text{C}$ )		MO (AlGaInP)	Unit
Reverse Voltage	$V_R$	5	V
DC Forward Current	$I_F$	70	mA
Power Dissipation	$P_D$	189	mW
Operating Temperature	$T_A$	-40 ~ +85	°C
Storage Temperature	$T_{stg}$	-55 ~ +85	
Lead Solder Temperature [1.5mm Below Seating Plane.][1]	260°C For 5 Seconds		

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MO (AlGaInP)	Unit
Forward Voltage (Typ.) ( $I_F=70\text{mA}$ )	$V_F$	2.3	V
Forward Voltage (Max.) ( $I_F=70\text{mA}$ )	$V_F$	2.7	V
Reverse Current (Max.) ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength of Peak Emission CIE127-2007* (Typ.) ( $I_F=70\text{mA}$ )	$\lambda_P$	610*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) ( $I_F=70\text{mA}$ )	$\lambda_D$	601*	nm
Spectral Line Full Width At Half Maximum (Typ.) ( $I_F=70\text{mA}$ )	$\Delta\lambda$	29	nm
Capacitance (Typ.) ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	C	30	pF
Thermal Resistance (Typ.)	$R_{\theta j-pin}$	125	°C/W

1.No Reflow soldering .

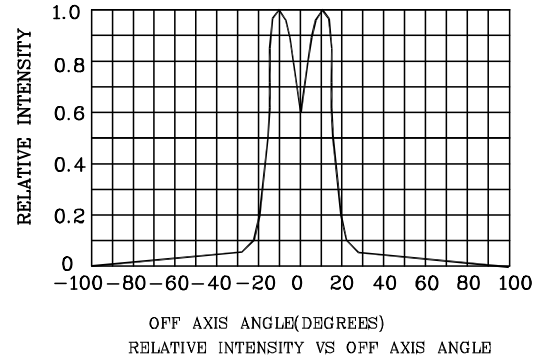
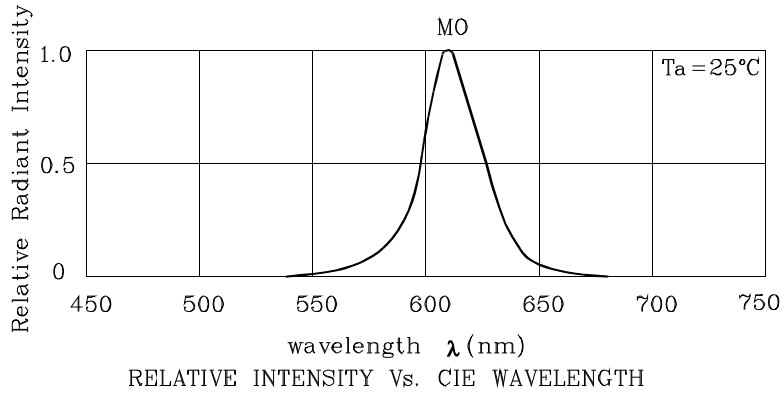
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ( $I_F=70\text{mA}$ ) cd		Luminous Flux CIE127-2007* ( $I_F=70\text{mA}$ ) lm	Wavelength CIE127-2007* $\lambda_P$ nm	Viewing Angle 2 $\theta$ 1/2
				min.	typ.	typ.		
XSMO783W	Orange	AlGaInP	Water Clear	3.6 2*	5.49 3.3*	1.8*	610*	30°

1.Luminous intensity is measured with an integrating sphere after the device has stabilized.

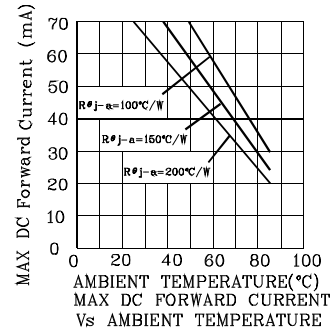
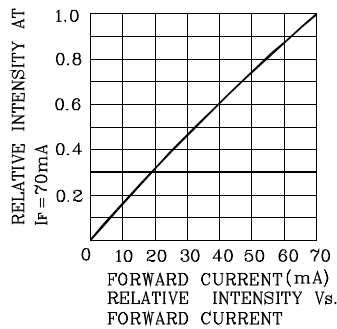
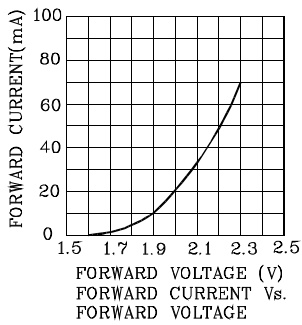
2. $\theta$  1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

3. LEDs are binned according to their Luminous intensity.

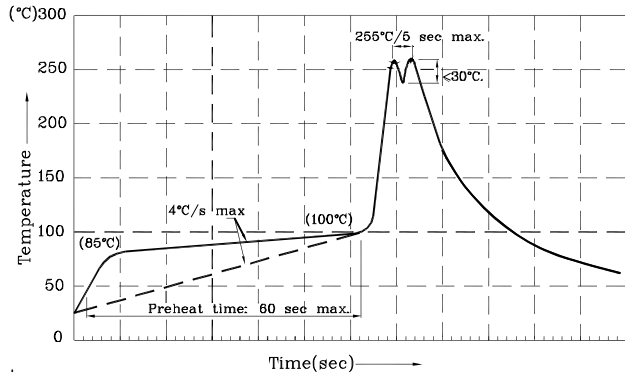
\* Luminous intensity / luminous flux value and wavelength are in accordance with CIE127-2007 standards.



❖ MO



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°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:

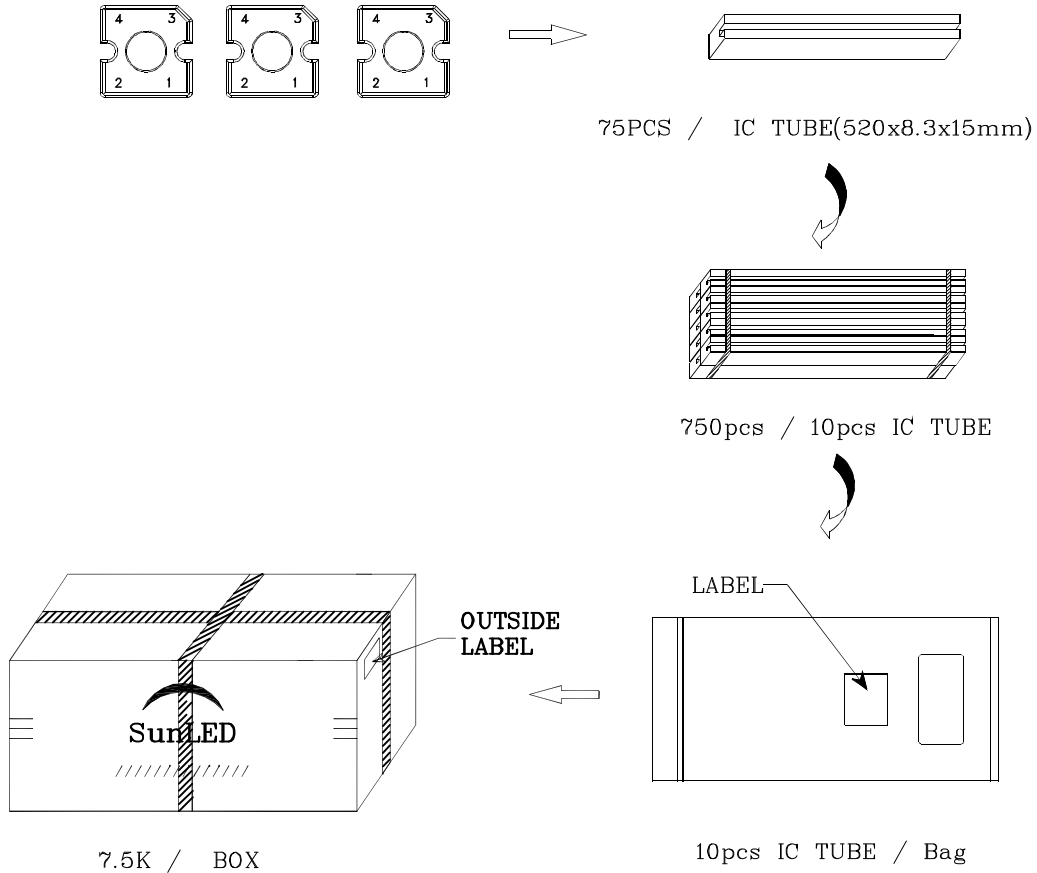

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

Q.C. Q C  
XX XX XXXX  
PASSED

P/NO : XSxxx783x	
QTY : 750 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	