OptoSupply
Light It Up

3.2x1.6 x1.8mm 850nm Infrared Dome Lens Chip LED

OSI3120641E

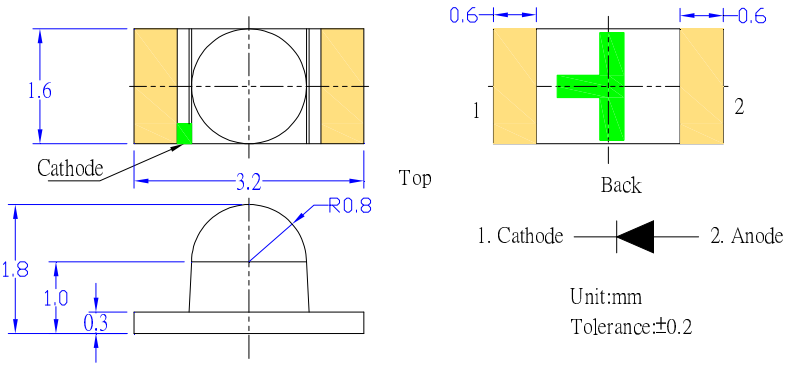
■Features

- Single chip
- Compact package outline
  (L x W x T) of 3.2mm x 1.6mm x1.8mm
- Compatible to IR reflow soldering.
- High power output of min. 5mW/Sr@20mA

■Applications

- Automatic Control System
- Photo Detector
- Computer I/O Peripheral

■Outline Dimension

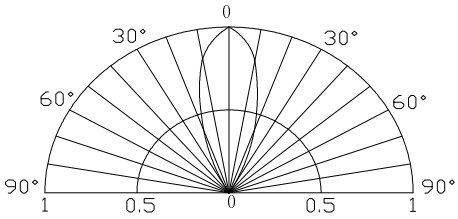


■Absolute Maximum Rating (Ta=25℃)

Item	Symbol	Value	Unit
DC Forward Current	I_F	75	mA
Pulse Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	120	mW
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40~ +85	℃
Lead Soldering Temperature	Tsol	260℃/5sec	-

*Pulse width Max 0.1ms, Duty ratio max 1/10

■Directivity



■Electrical -Optical Characteristics (Ta=25℃)

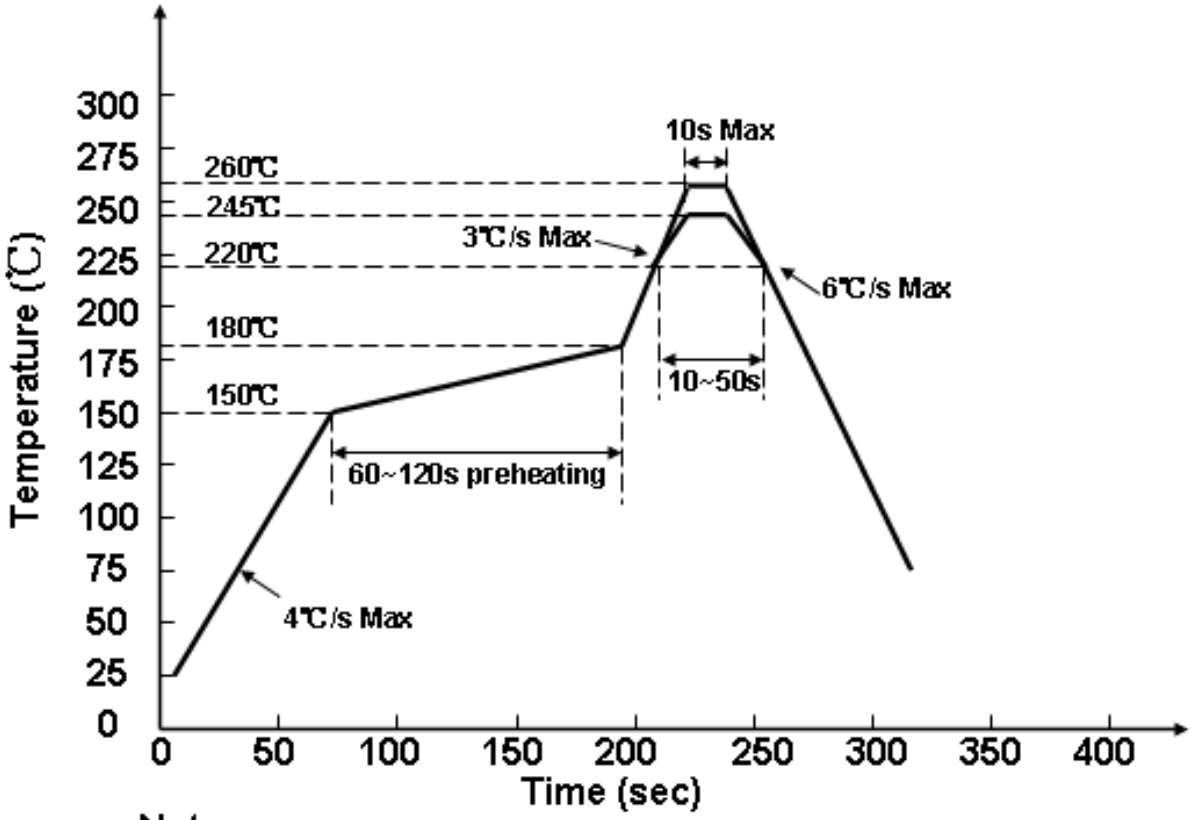
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	V_F	I_F=20mA	-	1.3	1.7	V
DC Reverse Current	I_R	V_R=5V	-	-	10	μA
Peak Wavelength	λ_p	I_F=20mA	-	850	-	nm
Radiant Intensity	Ie	I_F=20mA	5	10	-	mW/Sr
50% Power Angle	$2\theta_{1/2}$	I_F=20mA	-	35	-	deg

Note: * Vf tolerance: ±0.05V

* Dominant wavelength tolerance: ±1nm

* Luminous intensity is NIST reading. Luminous intensity tolerance:±10%

■ For Lead Free Solder



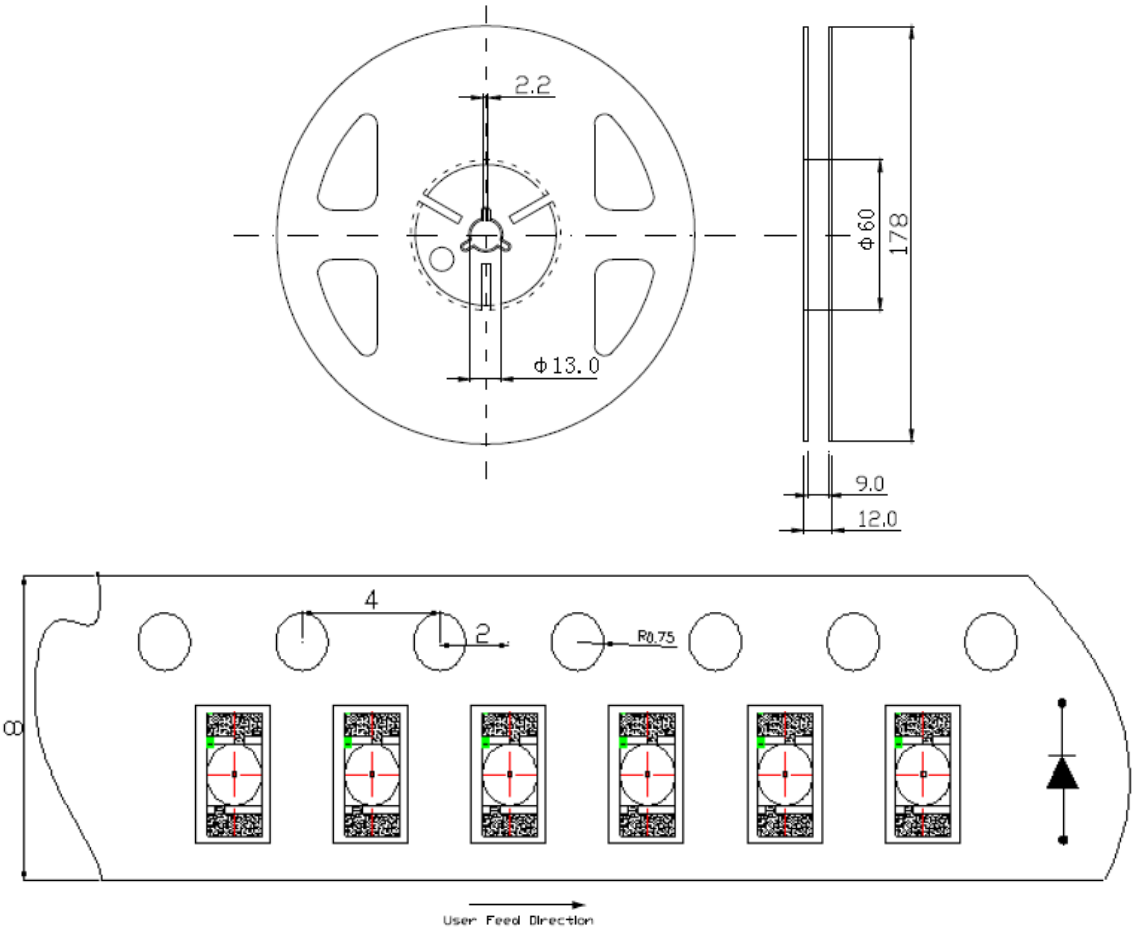
Notes:

We recommend the soldering temperature 245± 5℃ ;

The maximum temperature should be limited to 260 ℃.

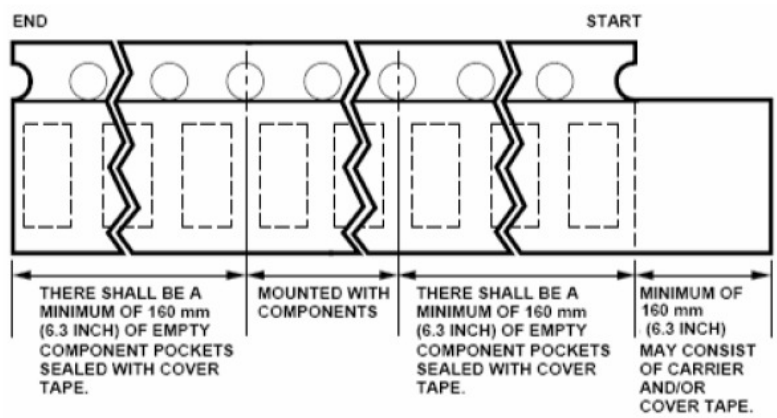
■Packaging

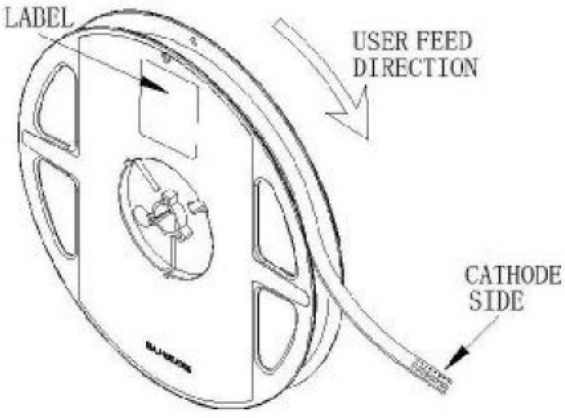
1. Reel & Tape Dimensions (2000Pcs/Reel)



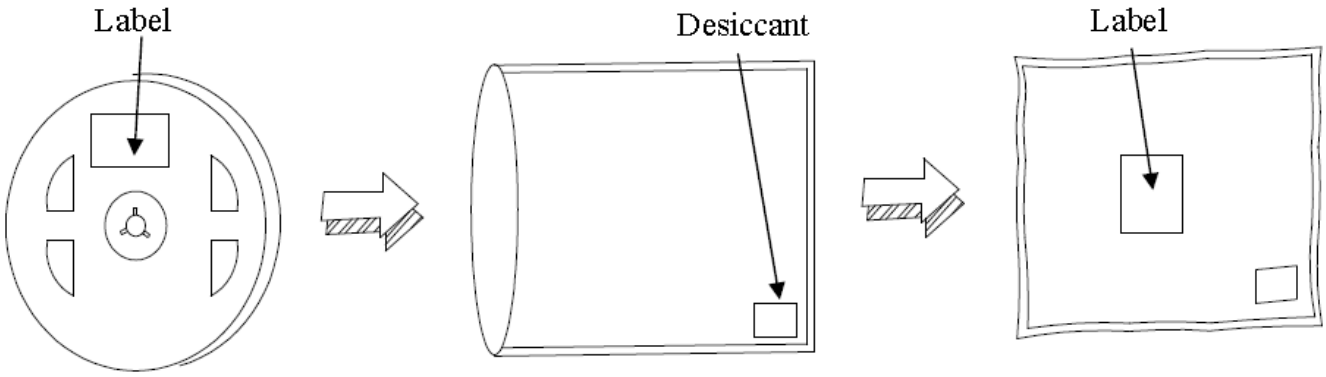
Notes: All dimensions are in millimeters

2.Tape leader & Trailer Dimensions & Reel





3. Bag Packaging



Reel Bag

■ Cautions:

1. After open the package, the LED´s floor life is 4 Weeks under 30℃ or less and 60%RH or less(MSL:2a).
2. Heat generation must be taken into design consideration when using the LED.
3. Power must be applied resistors for protection, over current would be caused the optic damage to the devices and wavelength shift.
4. Manual tip solder may cause the damage to Chip devices, so advised that heat of iron should be lower than 15W with temperature control under 5 seconds at 230-260 deg. C. (The device would be got damage in re working process, recommended under 5 seconds at 230-260 deg. C)
5. All equipment and machinery must be properly grounded. It is recommended to use a wristband or anti-electrostatic glove when handing the LED.
6. Use IPA as a solvent for cleaning the LED. The other solvent may dissolve the LED package and the epoxy, Ultrasonic cleaning should not be done.
7. Damaged LED will show unusual characteristics such as leak current remarkably increase, turn-on voltage becomes lower and the LED get unlight at low current.
8. OPTOSUPPLY will not do 4M change without advance consultation.