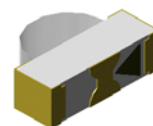


## Side View Package 940nm Infrared LED

### US 76H8

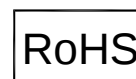
#### Description

The US 76H8 is used high efficiency 940nm GaAlAs materials, molded into side view package with clear lens. Comparing conventional GaAs/GaAs technology under similar wavelength, GaAlAs offers much higher radiant power. The viewing angle being offered is 150 degree.



#### Applications

- Opto-Electronic switch
- Infrared remote control unit
- Free air transmission system
- Infrared applied system



#### Electronic Optical Characteristics (at 20mA):

| Part Number | $\lambda$ (nm) |                 | Lens Color  | mW/sr |      | View Angle<br>(2 $\theta$ 1/2) | VF(V) |      |
|-------------|----------------|-----------------|-------------|-------|------|--------------------------------|-------|------|
|             | $\lambda_p$    | $\Delta\lambda$ |             | Min.  | Typ. |                                | Typ.  | Max. |
| US 76H8     | 940            | 45              | Water Clear | 0.5   | 0.8  | 150                            | 1.2   | 1.5  |

\* Radiant Intensity Typ. 4 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 1.90 Max.

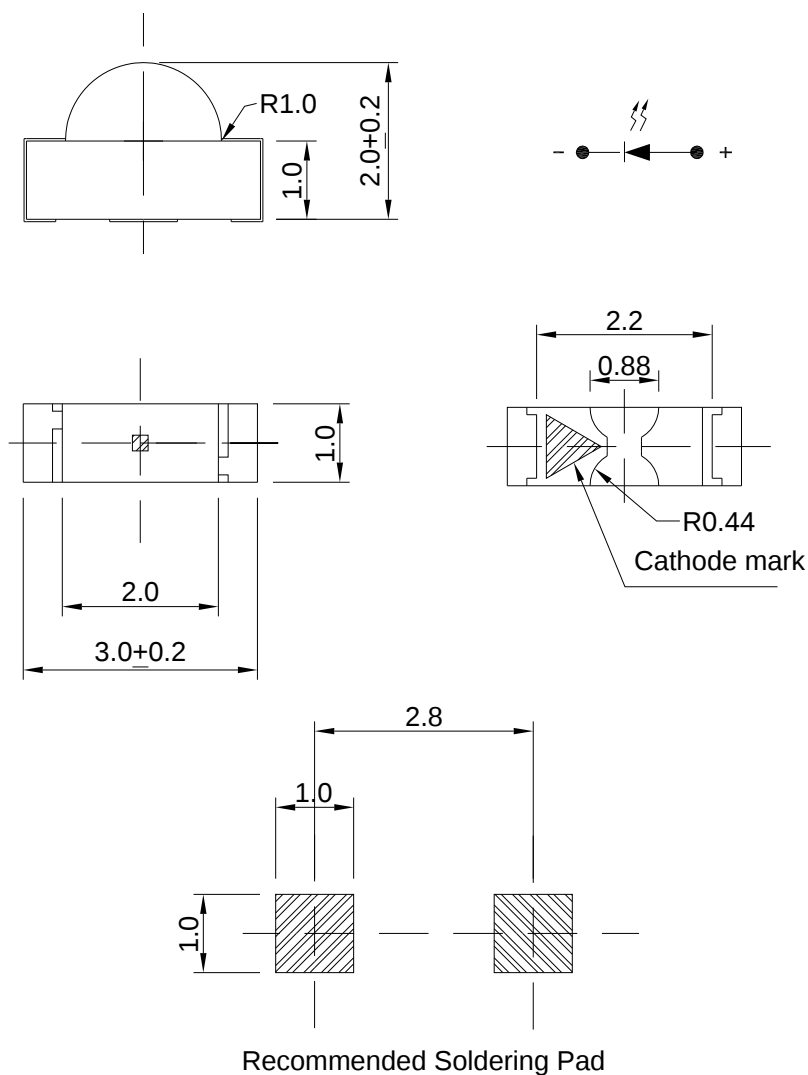
#### Absolute Maximum Ratings (@ Ta=25°C)

| Parameter                  | Symbol | Rating    | Unit | Condition                            |
|----------------------------|--------|-----------|------|--------------------------------------|
| Continuous Forward Current | IF     | 65        | mA   | ---                                  |
| Peak Forward Current       |        | 1.0       | A    | Pulse Width=100us<br>Duty Cycle = 1% |
| Soldering Temperature      | Tsol   | 260       | °C   | ----                                 |
| Storage Temperature        | Tstg   | -40 - +85 | °C   | ----                                 |
| Operating Temperature      | Topr   | -40 - +85 | °C   | ----                                 |
| Power Dissipation          | PD     | 130       | mW   | 25°C Free Air Temperature            |

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

## Package Dimension:

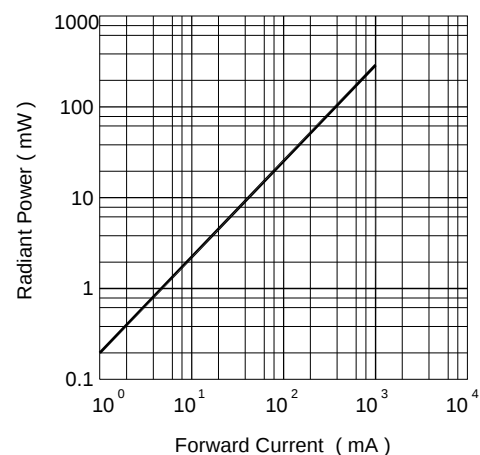
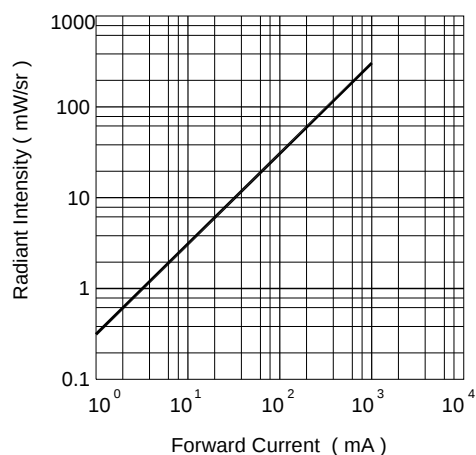
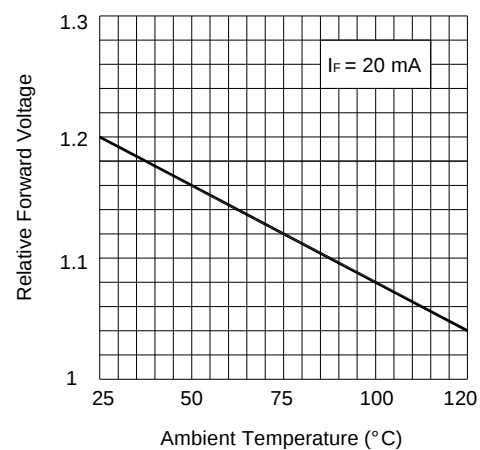
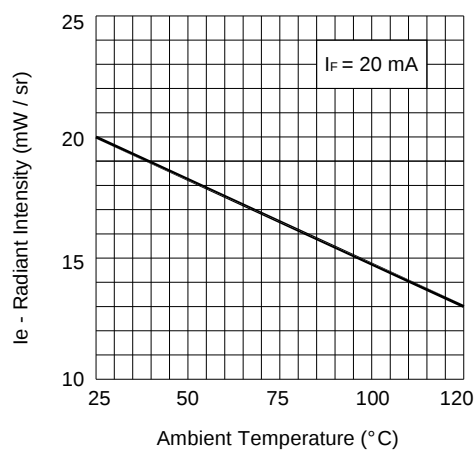
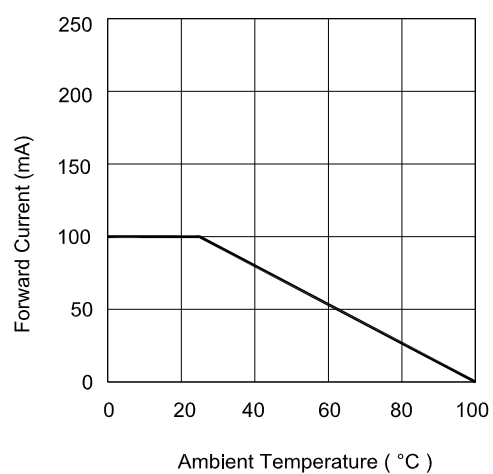
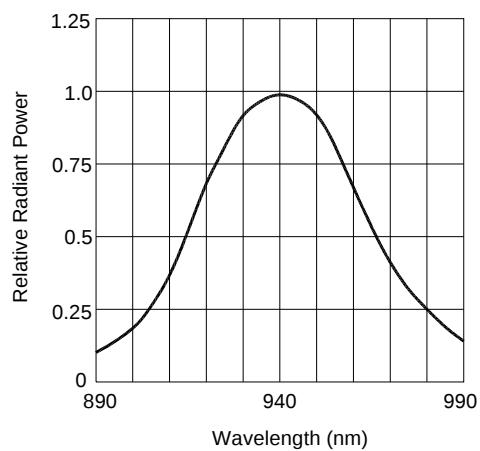
unit:mm



## Notes:

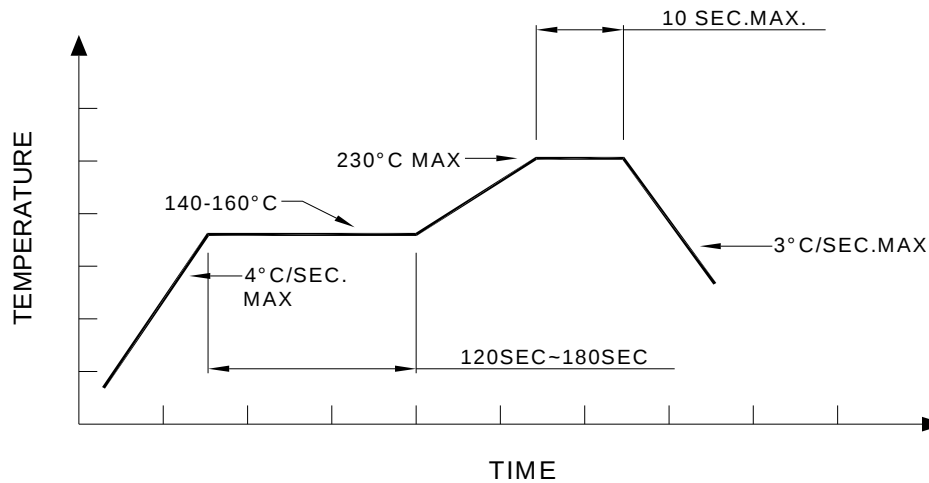
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Specifications are subject to change without notice.

## Optical Characteristics Curves

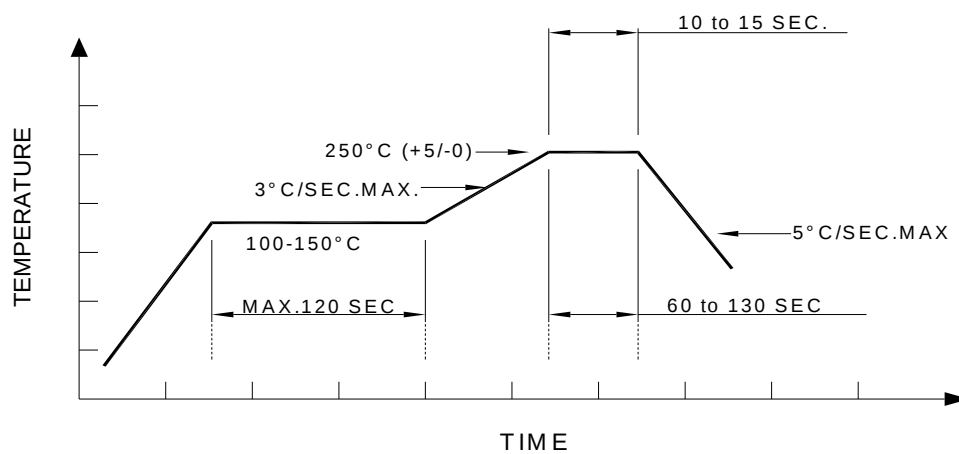




### Recommended re-flow soldering profile:



### Recommended Pb-free re-flow soldering profile:



### Note:

All the specifications listed in this data sheet are suitable for general electronic equipment, office equipment and communication devices. Kindly consult Sales Representatives for specific reliabilities request, Forward Voltage, Luminous Intensity, Wavelength, Radiant Power or Viewing Angle.