## Features

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable \& robust
- Custom color combinations available
- RoHS Compliant



## 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 <br> $\left(\mathbf{T}_{\mathrm{A}}=\mathbf{2 5} \mathbf{5}^{\circ} \mathbf{C}\right.$ ) | UR <br> (GaAsP/GaP) | Unit |  |
| :--- | :---: | :---: | :---: |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 5 | V |
| Forward Current | $\mathrm{I}_{\mathrm{F}}$ | 30 | mA |
| Forward Current (Peak) <br> $1 / 10$ Duty Cycle <br> 0.1 ms Pulse Width | $\mathrm{i}_{\mathrm{FS}}$ | 160 | mA |
| Power Dissipation | $\mathrm{P}_{\mathrm{D}}$ | 75 | mW |
| Operating Temperature | $\mathrm{T}_{\mathrm{A}}$ | $-40 \sim+85$ | C |
| Storage Temperature | Tstg | $-40 \sim+85$ |  |
| Lead Solder Temperature <br> $[2 \mathrm{~mm}$ Below Package Base] | $260^{\circ} \mathrm{C}$ For 3 Seconds |  |  |
| Lead Solder Temperature <br> $[5 \mathrm{~mm}$ Below Package Base] | $260^{\circ} \mathrm{C}$ For 5 Seconds |  |  |


| Operating Characteristics ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { UR } \\ \text { (GaAsP/GaP) } \end{gathered}$ | Unit |
| :---: | :---: | :---: | :---: |
| Forward Voltage (Typ.) $\left(\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}\right)$ | VF | 1.9 | V |
| Forward Voltage (Max.) $\left(\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}\right)$ | $\mathrm{V}_{\mathrm{F}}$ | 2.5 | V |
| Reverse Current (Max.) $\left(\mathrm{V}_{\mathrm{R}}=5 \mathrm{~V}\right)$ | $\mathrm{I}_{\text {R }}$ | 10 | uA |
| Wavelength of Peak <br> Emission CIE127-2007* (Typ.) $\left(\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}\right)$ | 入P | 627* | nm |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) ( $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ ) | 入D | 617* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ( $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ ) | $\triangle \lambda$ | 45 | nm |
| $\begin{aligned} & \text { Capacitance (Typ.) } \\ & \left(\mathrm{V}_{\mathrm{F}}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}\right) \end{aligned}$ | C | 15 | pF |


| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity CIE127-2007* ( $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ ) | Wavelength CIE127-2007* nm | Viewing Angle |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $2 \theta 1 / 2$ |


|  |  |  |  | min. | typ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| XQT2LUR11D | Red | GaAsP/GaP | Red Diffused | $\begin{aligned} & 12 \\ & 10 * \end{aligned}$ | $\begin{aligned} & 29 \\ & 19^{*} \end{aligned}$ | 627* | $40^{\circ}$ |

[^0]

## UR






Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)


Time $(s e c) \longrightarrow$
Notes

1. Recommend pre-heat temperature of $105^{\circ} \mathrm{C}$ 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 $260^{\circ} \mathrm{C}$
2.Peak wave soldering temperature between $245^{\circ} \mathrm{C} \sim 255^{\circ} \mathrm{C}$ for 3 sec
2. Peak wave so
(5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above $85^{\circ} \mathrm{C}$
4. Fixtures should not incur stress on the component when mounting and
during soldering process.
5.SAC 305 solder alloy is recommended.
5. 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: $+/-1 \mathrm{~nm}$
2. Luminous Intensity / Luminous Flux: +/-15\%
3. Forward Voltage: $+/-0.1 \mathrm{~V}$

Note: Accuracy may depend on the sorting parameters.

## PACKING \& LABEL SPECIFICATIONS



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2. Contents within this document are subject to improvement and enhancement changes without notice.
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[^0]:    *Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

