



## Selection Guide

| Part No.             | Dice                      | Lens Type   | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|----------------------|---------------------------|-------------|--------------------|------|------------------|
|                      |                           |             | Min.               | Typ. | 2 $\theta$ 1/2   |
| APBL3025SRQGCP-R-F01 | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR | 36                 | 100  | 100°             |
|                      | GREEN (GaP)               |             | 7                  | 20   |                  |

Note:

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

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

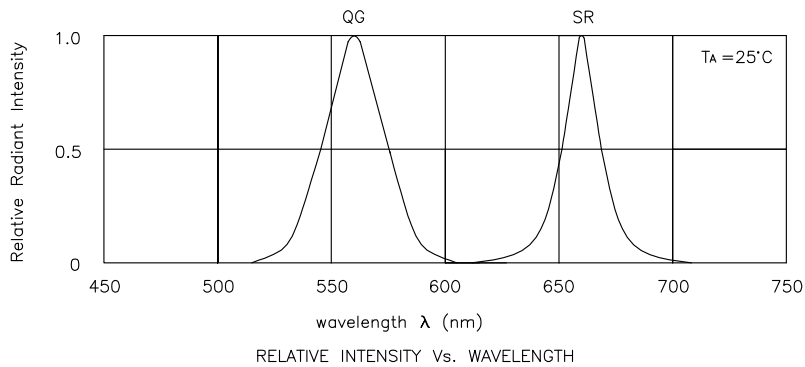
| Symbol                | Parameter                | Device                    | Typ.         | Max.       | Units | Test Conditions           |
|-----------------------|--------------------------|---------------------------|--------------|------------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Red<br>Green | 660<br>560   |            | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$           | Dominant Wavelength      | Super Bright Red<br>Green | 640<br>565   |            | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Red<br>Green | 20<br>30     |            | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Super Bright Red<br>Green | 45<br>45     |            | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>        | Forward Voltage          | Super Bright Red<br>Green | 1.85<br>2.15 | 2.5<br>2.5 | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | All                       |              | 10         | uA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

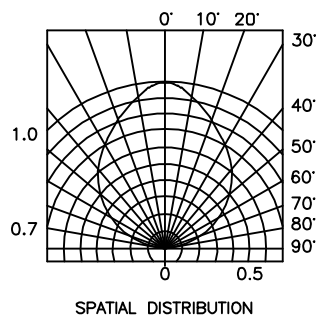
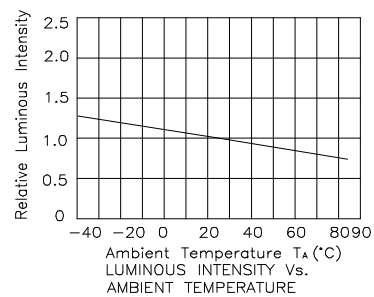
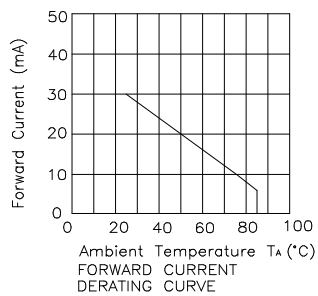
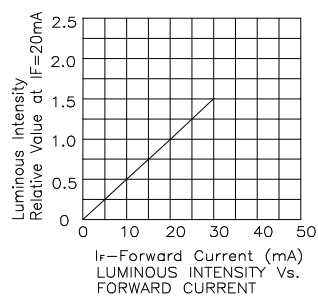
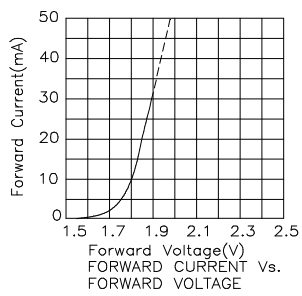
| Parameter                     | Super Bright Red | Green | Units |
|-------------------------------|------------------|-------|-------|
| Power dissipation             | 100              | 105   | mW    |
| DC Forward Current            | 30               | 25    | mA    |
| Peak Forward Current [1]      | 155              | 130   | mA    |
| Reverse Voltage               | 5                |       | V     |
| Operating/Storage Temperature | -40°C To +85°C   |       |       |

Note:

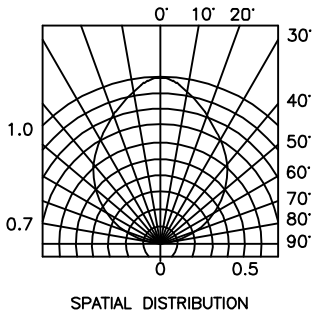
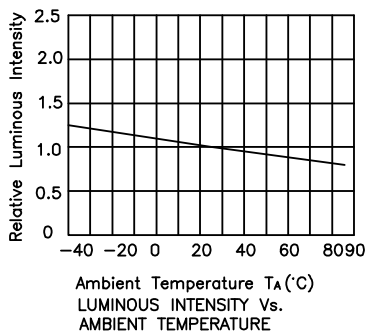
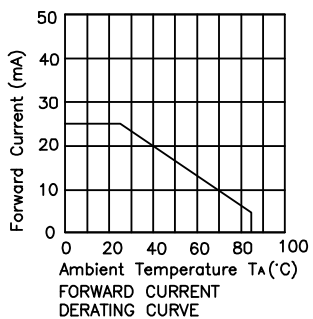
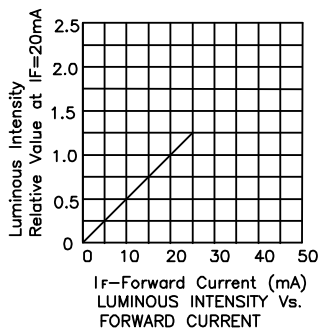
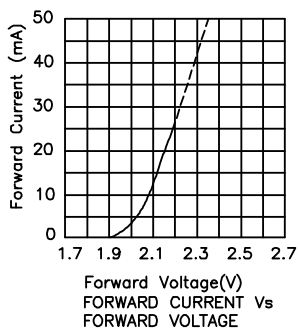
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



## APBL3025SRQG CPR-F01 Super Bright Red

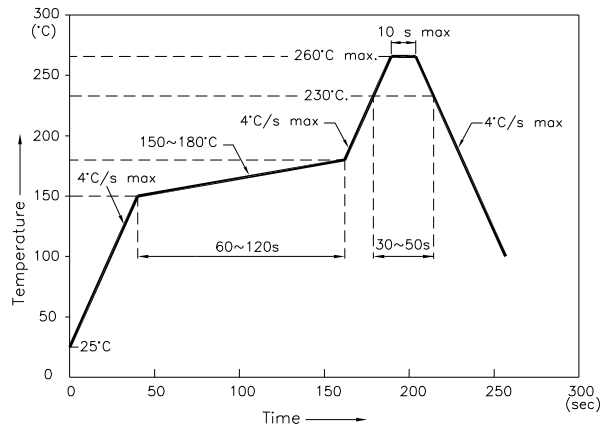


## Green



## APBL3025SRQG CPR-F01

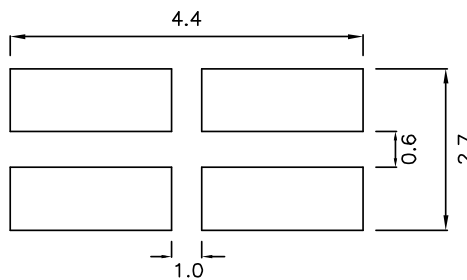
Reflow Soldering Profile For Lead-free SMT Process.



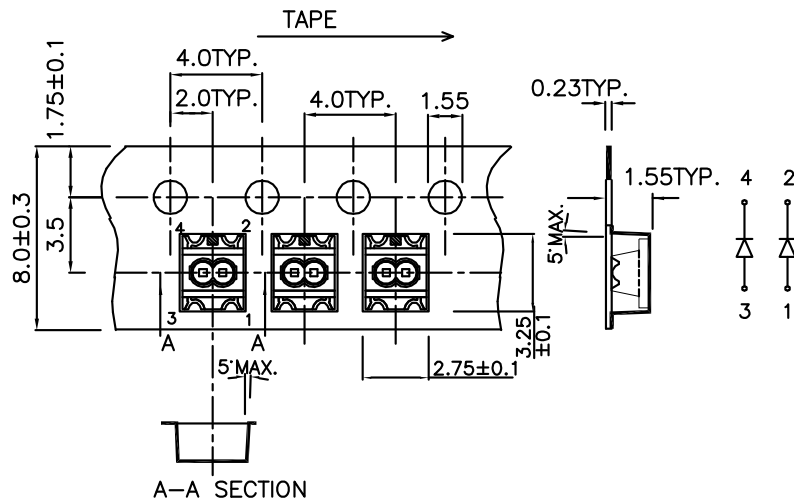
**NOTES:**

1. We recommend the reflow temperature 245°C (+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)



**Remarks:**

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

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.