

## 850nm 128um RCLED Chip

Part No. RCLC-85A128

### Features

- 850nm RCLED chip
- Enhanced coupling efficiency
- 128um emitting diameter

### Applications

- Data link communication
- Industrial application
- Sensors



### Specifications

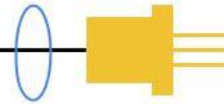
| Absolute Maximum Ratings   |      |      |      |                                    |  |
|----------------------------|------|------|------|------------------------------------|--|
| Parameters                 | Min. | Max. | Unit | Conditions                         |  |
| Storage temperature        | -40  | 100  | °C   |                                    |  |
| Operating temperature      | -20  | 85   | °C   |                                    |  |
| Continuous Forward Current |      | 40   | mA   |                                    |  |
| Continuous Reverse Voltage |      | 5    | V    | 10uA                               |  |
| Pulse Current              |      | 300  | mA   | Pulse width: 4us, duty cycle: 1-5% |  |

| Electro-Optical Characteristics (T <sub>a</sub> =25°C unless otherwise stated) |                |      |      |      |      |                            |
|--|----------------|------|------|------|------|----------------------------|
| Parameters   | Symbol         | Min. | Typ. | Max. | Unit | Conditions                 |
| Total Radiant Flux   | Φ <sub>o</sub> | 1.5  | 2    |      | mW   | I <sub>f</sub> =30mA       |
| Peak Wavelength  | λ <sub>P</sub> | 840  | 850  | 860  | nm   | I <sub>f</sub> =30mA       |
| Spectral Width   | Δλ             |      | 20   |      | nm   | I <sub>f</sub> =30mA, FWHM |
| Beam Divergence  | Θ              |      | 120  |      | °    | I <sub>f</sub> =30mA, FWHM |
| Forward Voltage  | V <sub>f</sub> |      | 1.6  |      | V    | I <sub>f</sub> =30mA       |

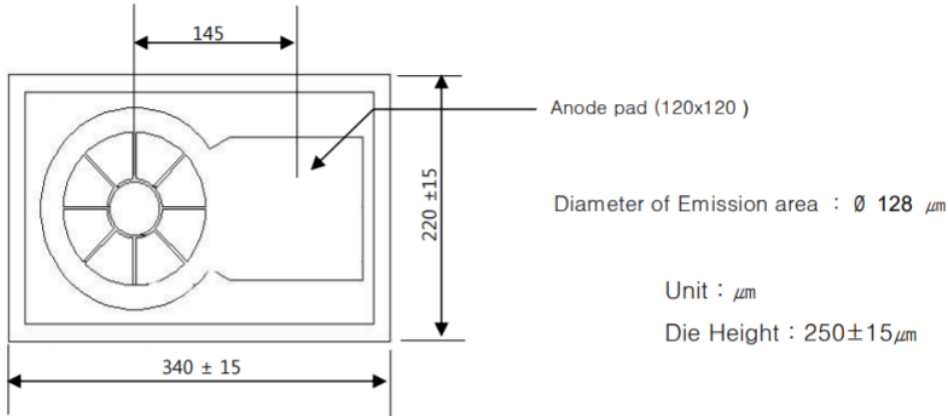
Notes:

- Test Data were measured in TO-header of wire bonded chip.
- Value is referenced to the vender's measurement system (correlation to customer product is required).

| Thermal Characteristics                |                      |      |      |      |       |   |
|--|----------------------|------|------|------|-------|---|
| Parameters                             | Symbol               | Min. | Typ. | Max. | Unit  | Conditions  |
| P <sub>o</sub> Temperature Coefficient | Δ P <sub>o</sub> /ΔT |      | -0.5 |      | %/°C  | T <sub>a</sub> =-20 to 85°C at I <sub>f</sub> =30mA |
| λ <sub>P</sub> Temperature Coefficient | Δλ/ΔT                |      | 0.06 |      | nm/°C | T <sub>a</sub> =-20 to 85°C at I <sub>f</sub> =30mA |



### Outline Dimensions



### Additional Notes

- The inherent design of this component causes it to be sensitive to electrostatic discharge (ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product.
- Specifications are subject to change without notice.