



## RCLC-85A128 850nm 128um RCLED Chip



### Description

The RCLC-85A128 is an 850nm wavelength, resonant cavity light emitting diode (RCLED) chip with 128um emitting diameter. The RCLED chip is designed for data link communication, sensors and industrial application.

### 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%	

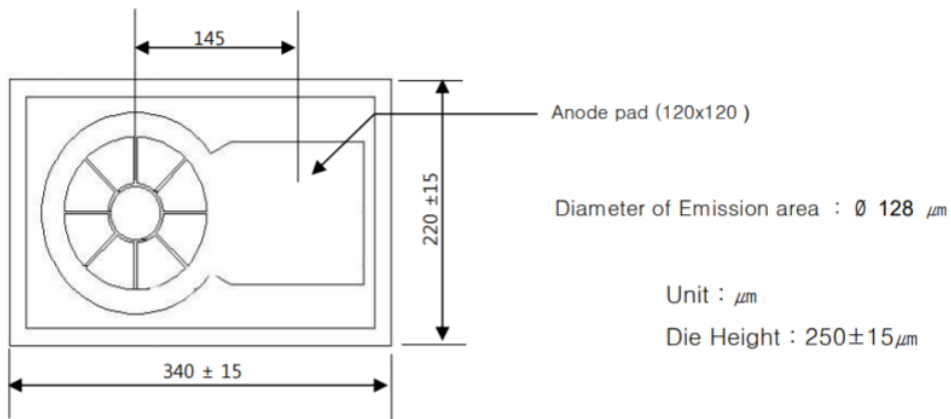
Electro-Optical Characteristics (T <sub>a</sub> =25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Total Radiant Flux	Φ <sub>o</sub>	1.5	2		mW	I <sub>f</sub> =30mA
Peak Wavelength	λ <sub>p</sub>	840	850	860	nm	I <sub>f</sub> =30mA
Spectral Width	Δλ		20		nm	I <sub>f</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.