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RCLC-85A128
850nm 128um RCLED Chip

Description

The RCLC-85A128 is an 850nm wavelength resonant cavity light emitting diode (RCLED) chip with a 128µm emitting diameter. Engineered for high performance, the device offers enhanced coupling efficiency, making it ideal for data link communication, sensors, and industrial applications.

Features

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

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%

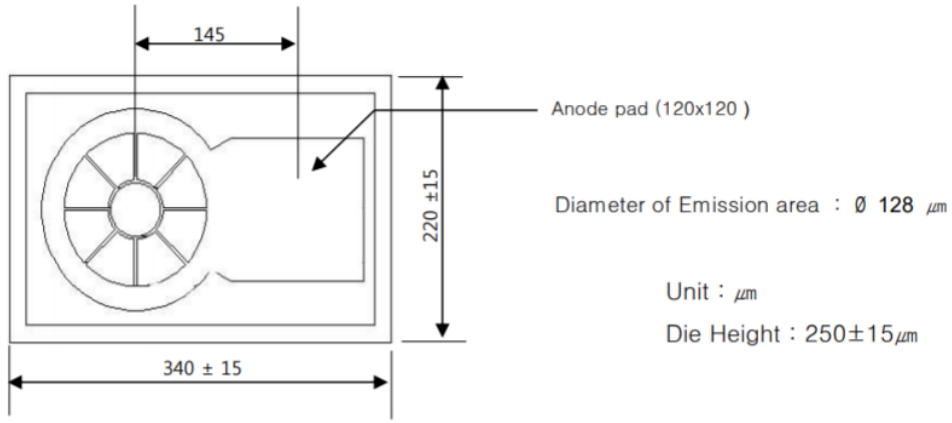
Electro-Optical Characteristics (T_a=25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Total Radiant Flux	Φ_o	1.5	2		mW	I_f=30mA
Peak Wavelength	λ_P	840	850	860	nm	I_f=30mA
Spectral Width	$\Delta\lambda$		20		nm	I_f=30mA, FWHM
Beam Divergence	Θ		120		°	I_f=30mA, FWHM
Forward Voltage	V_f		1.6		V	I_f=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_o Temperature Coefficient	$\Delta P_o/\Delta T$		-0.5		%/°C	T_a=-20 to 85°C at I_f=30mA
λ_P Temperature Coefficient	$\Delta\lambda/\Delta T$		0.06		nm/°C	T_a=-20 to 85°C at I_f=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.