

## 155Mbps 650nm RCLED Chip

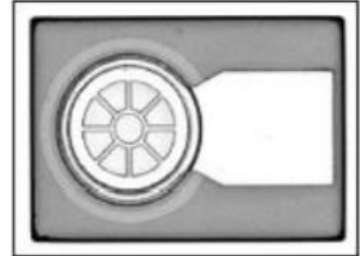
Part No. RCLC-65A155M

### Features

- 650nm RCLED chip
- No threshold
- Designed for POF data communication

### Applications

- Data link communication
- IEEE 1394.b
- Home networking
- Sensors



### Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-20	70	°C	
Continuous Forward Current		30	mA	
Continuous Reverse Voltage		5	V	10uA

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	1.5	mW	I <sub>f</sub> =20mA*
Radiant Intensity	P <sub>o</sub>	0.2	0.3		mW/sr	I <sub>f</sub> =20mA**
Peak Wavelength	λ <sub>p</sub>	640	650	660	nm	I <sub>f</sub> =20mA**
Spectral Width	Δλ		7		nm	T <sub>a</sub> =0 to 70°C at 20mA**
Beam Divergence	Θ		90		°	I <sub>f</sub> =20mA, FWHM
Forward Voltage	V <sub>f</sub>		2.0	2.2	V	I <sub>f</sub> =20mA
Rise Time/Fall Time	t <sub>R</sub> /t <sub>F</sub>		3/3		ns	I <sub>f</sub> =20mA, (10%~90%)
Data Rate	T <sub>Data</sub>		155		Mbps	I <sub>f</sub> =20mA

Notes:

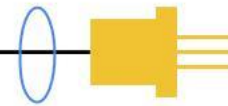
Test Data were measured in TO-header of wire bonded chip.

\*Measured in integrating sphere

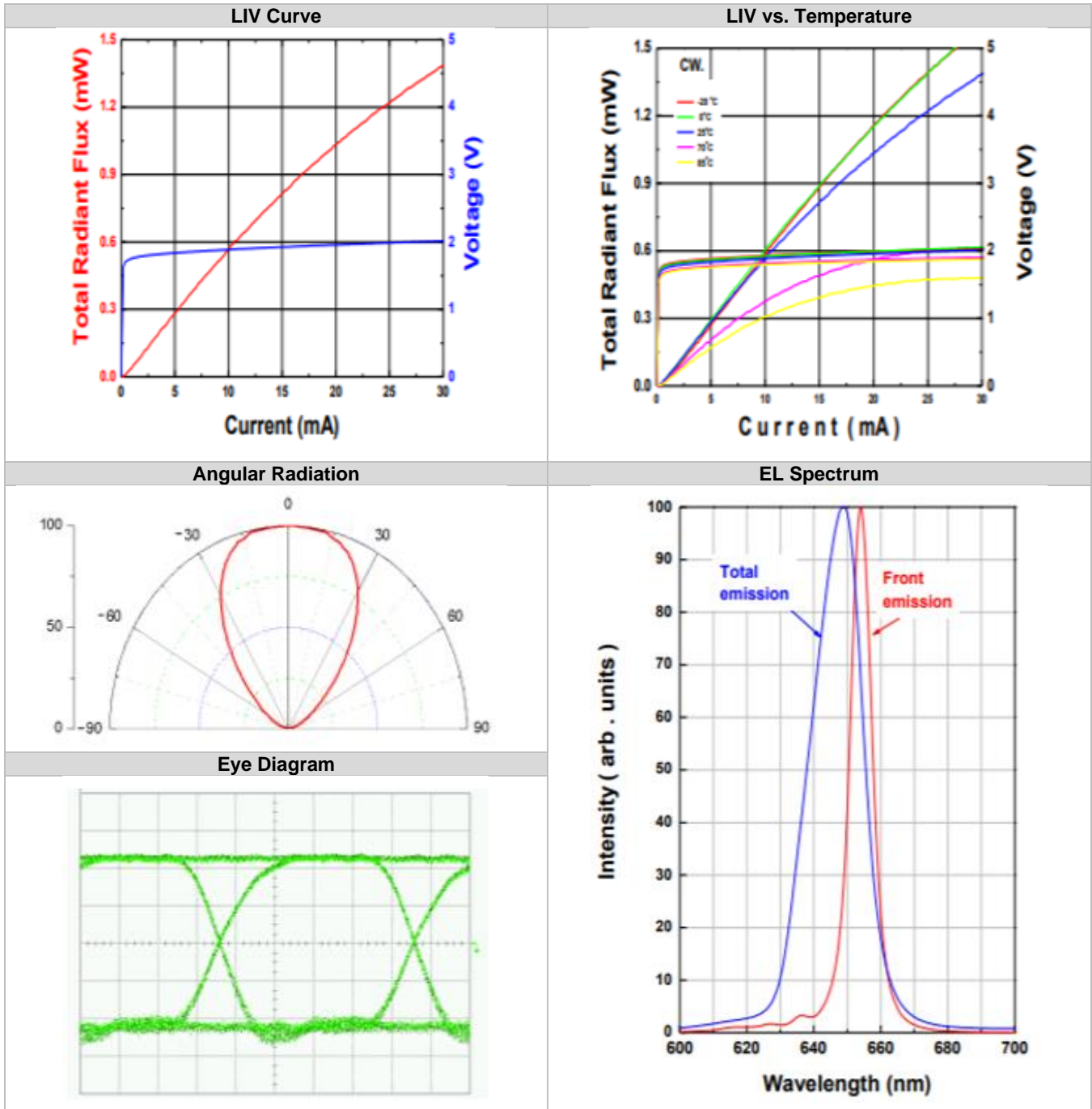
\*\*Measured in axial direction (0.01sr)

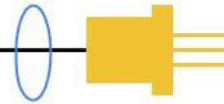
\*\*\*Value is referenced to the vender's measurement system (correlation to customer product is required).

Thermal Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
P <sub>o</sub> Temperature Coefficient	Δ P <sub>o</sub> /ΔT		-0.6		%/°C	T <sub>a</sub> =-20 to 70°C at I <sub>f</sub> =20mA
λ <sub>p</sub> Temperature Coefficient	Δλ/ΔT		0.07		nm/°C	T <sub>a</sub> =-20 to 70°C at I <sub>f</sub> =20mA

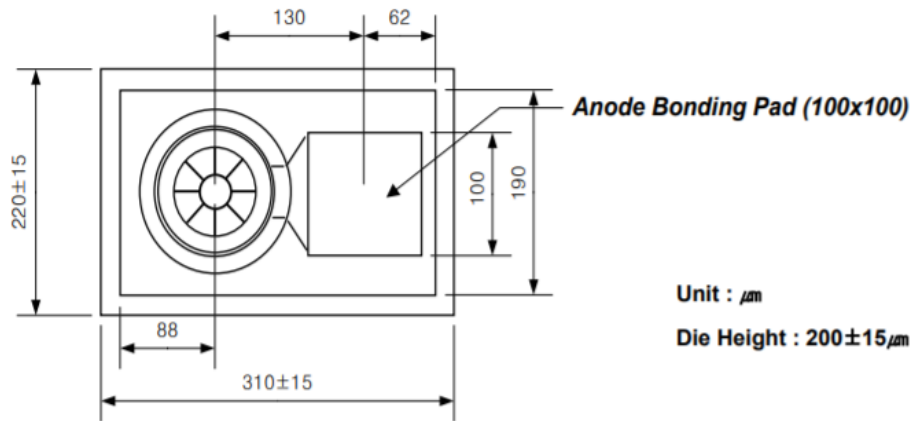


### Typical Characteristics





## 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.