

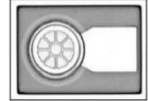


RCLC-65A155M

155Mb/s 650nm RCLED Chip

Description

The RCLC-65A155M is a 650nm wavelength, resonant cavity light emitting diode (RCLED) chip designed for POF data communications.



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 _a =25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Total Radiant Flux	Φ _o		1	1.5	mW	I _f =20mA*
Radiant Intensity	P _o	0.2	0.3		mW/sr	I _f =20mA**
Peak Wavelength	λ _p	640	650	660	nm	I _f =20mA**
Spectral Width	Δλ		7		nm	T _a =0 to 70°C at 20mA**
Beam Divergence	Θ		90		°	I _f =20mA, FWHM
Forward Voltage	V _f		2.0	2.2	V	I _f =20mA
Rise Time/Fall Time	t _R /t _F		3/3		ns	I _f =20mA, (10%~90%)
Data Rate	T _{Data}		155		Mbps	I _f =20mA

Notes:

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

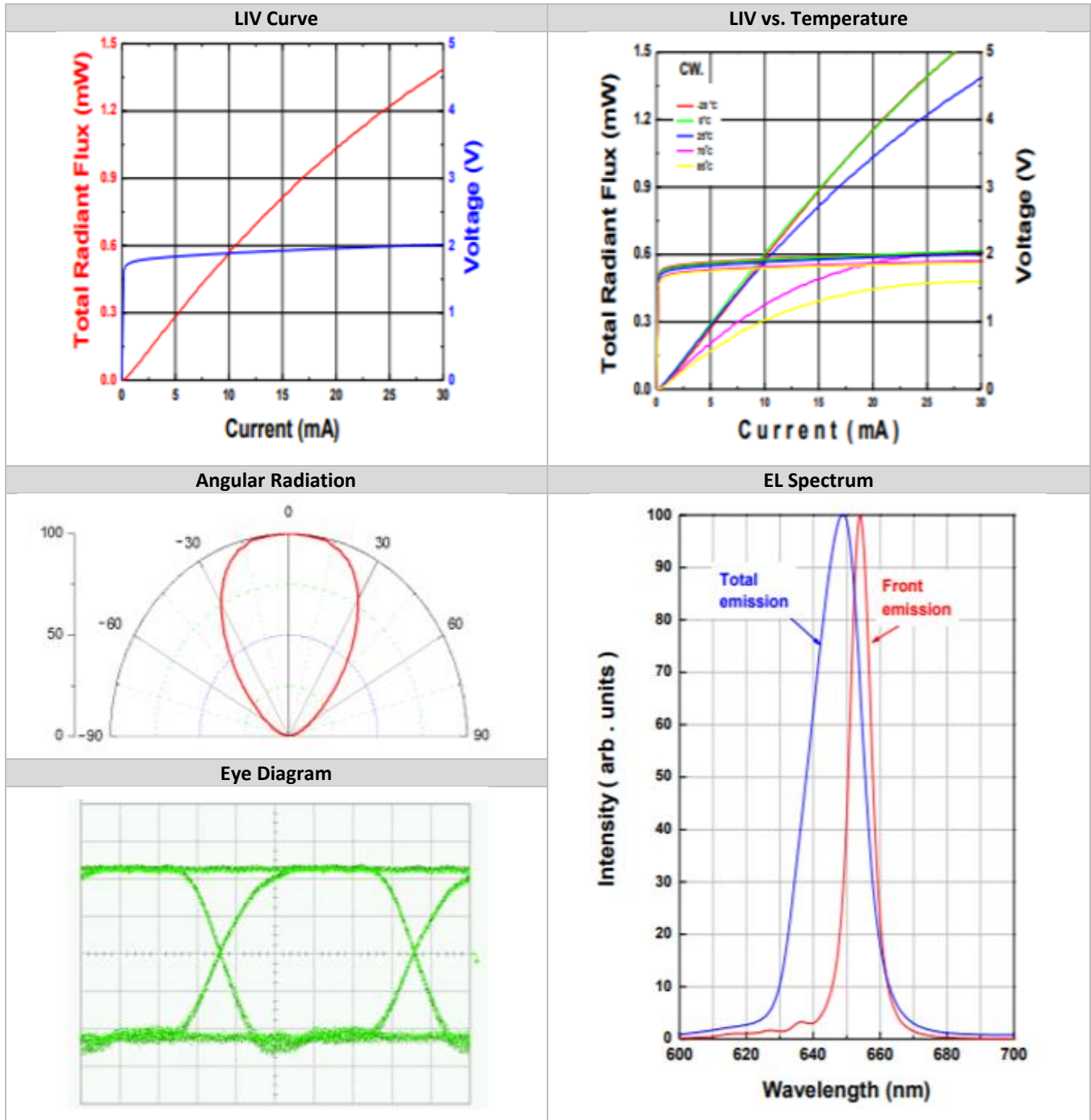
*Measured in integrating sphere

**Measured in axial direction (0.01sr)

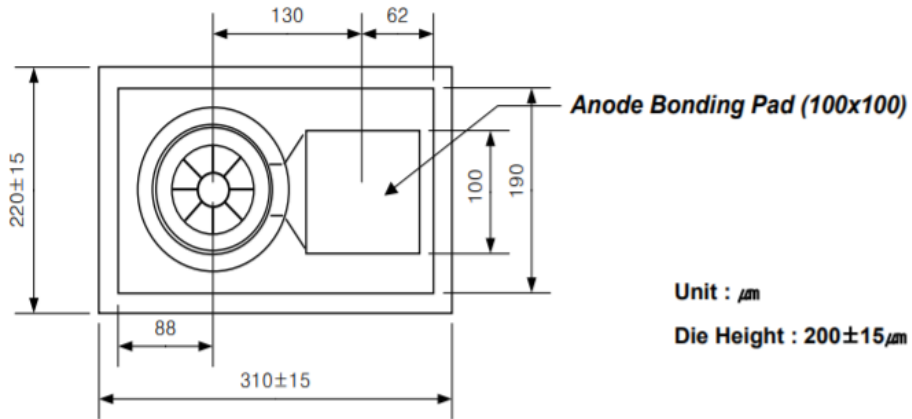
***Value is referenced to the vender's measurement system (correlation to customer product is required).

Thermal Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
P _o Temperature Coefficient	Δ P _o /ΔT		-0.6		%/°C	T _a =-20 to 70°C at I _f =20mA
λ _p Temperature Coefficient	Δλ/ΔT		0.07		nm/°C	T _a =-20 to 70°C at I _f =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.