

**Features**

- : 650 nm wavelength range
- : No threshold
- : Designed for POF data communications
- : Flat window Type TO-18 Can Package
- : Other configurations available on request

**Applications**

- : Data Link Communication
- : IEEE1394.b
- : Home Networking
- : Sensors

**Description**

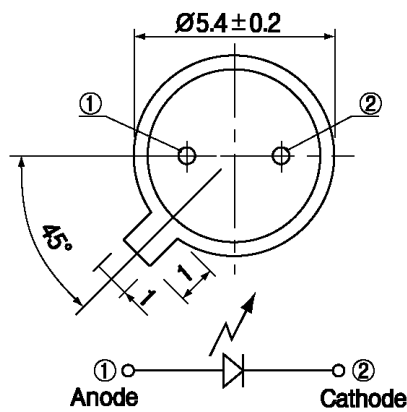
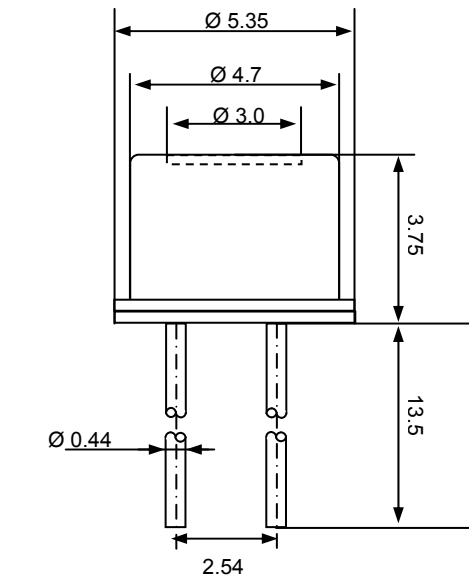


**Absolute Maximum Ratings**

Parameter	Rating
Storage Temperature	-40 to +100 °C
Operating Temperature	-20 to 70 °C
Lead Solder Temperature	260 °C, 10 sec
Continuous Forward Current	30mA
Continuous Reverse Voltage	5V (@10μA)

Dimensions

Unit:mm



PINOUT

Number	Function
1	A <sub>RCLED</sub>
2	K <sub>RCLED</sub>
3	NC

**Electro-Optics Characteristics (T<sub>a</sub>=25°C unless otherwise stated)**

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Total Radiant Flux	$\Phi_o$		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	$\lambda_p$	640	650	660	nm	I <sub>f</sub> =20mA**
Spectral Width	$\Delta\lambda$		7		nm	T <sub>a</sub> =0 to 70 °C at 20mA**
Beam Divergence	$\Theta$		90		Deg.	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

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	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
P <sub>o</sub> Temp Coefficient	$\Delta P_o / \Delta T$		-0.6		%/ °C	-20 °C ~ 70 °C at I <sub>f</sub> =20mA
$\lambda_p$ Temp Coefficient	$\Delta\lambda / \Delta T$		0.07		nm/ °C	-20 °C ~ 70 °C at I <sub>f</sub> =20mA

**Notes**

\* These specifications are subject to change without notice.

**NOTICE**

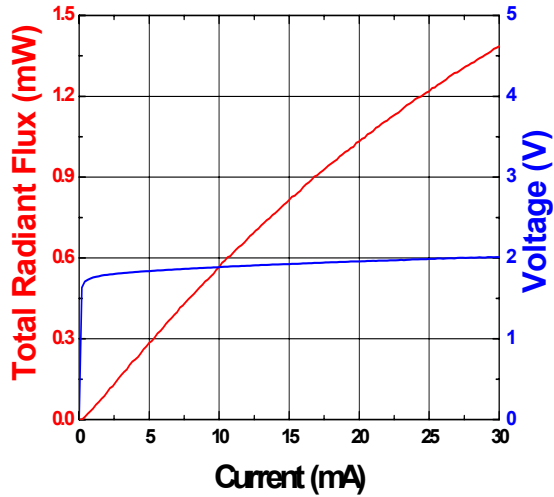
The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

**DANGER**

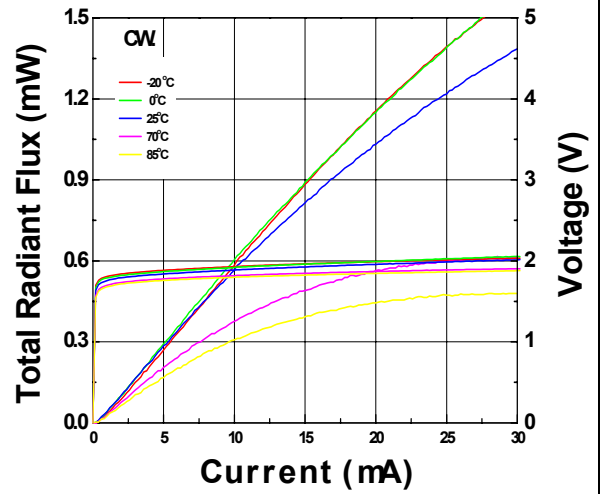
The RCLED should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.

Characteristics Curves

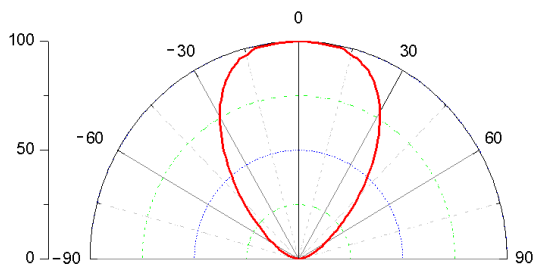
LIV Curve



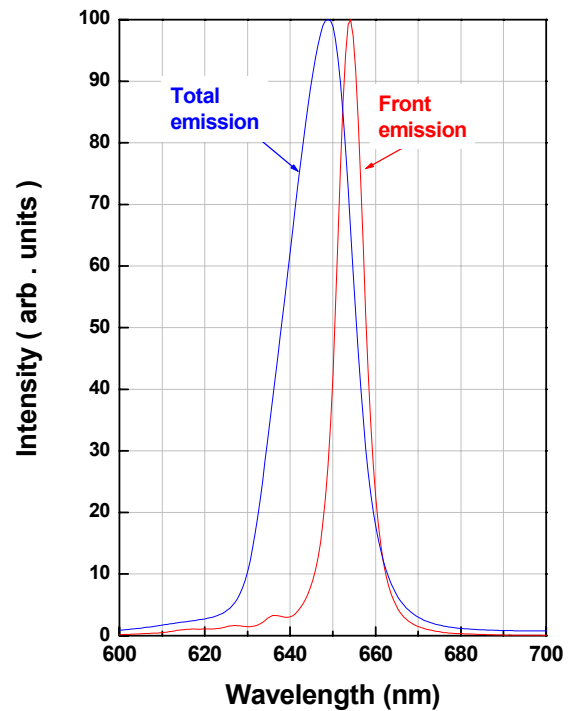
LIV vs Temperature



Angular Radiation



EL Spectrum



Eye Diagram

