

## CURRENT REGULATIVE LED

# CRLED

- CRLED is LED which supplies constant current to keep LED Intensity Consistency even when power supply voltage fluctuations or load impedance fluctuations occur.

- CRLED is used with current stabilization and current limiting

### ■ Features

- High Luminous LEDs / 5mm Cylinder Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

### ■ Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V <sub>F</sub>	20	V
Power Dissipation	P <sub>D</sub>	320	mW
Operating Temperature	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Lead Soldering Temperature	Tsol	260°C/5sec	-

### ■ Electrical -Optical Characteristics

(Ta=25°C)

Part Number	Color	V <sub>F</sub> (V)		I <sub>F</sub> (mA)			I <sub>R</sub> (μA)	I <sub>v</sub> (mcd)*			λD(nm)*			2θ1/2(deg)	
		Min	Max	Min	Typ.	Max.	Max..	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.	
		V <sub>F</sub> =12V		V <sub>R</sub> =8V			V <sub>F</sub> =12V								
OSW5DK5T51A-CRLED14	White	5.5	20	-	14	-	10	-	5800	-	X=0.27, Y=0.28			50	
OSM5DK5T51A-CRLED14	Warm White	5.5	20	-	14	-	10	-	5000	-	X=0.45, Y=0.41			50	
OSB64L5AT51A-CRLED14	Ice Blue	5.5	20	-	14	-	10	-	5500	-	X=0.19, Y=0.29			50	
OSB5SA5T51A-CRLED14	Blue	5.5	20	-	14	-	10	-	3000	-	465	470	475	50	
OSG5DA5T51A-CRLED14	Pure Green	5.5	20	-	14	-	10	-	5800	-	520	525	530	50	
OSY5PA5T51A-CRLED14	Yellow	5	20	-	14	-	10	-	3500	-	585	590	595	50	
OSO5PA5T51A-CRLED14	Orange	5	20	-	14	-	10	-	4200	-	600	605	610	50	
OSR5PA5T51A-CRLED14	Red	5	20	-	14	-	10	-	3500	-	620	625	630	50	

\*1 Tolerance of measurements of chromaticity coordinate is ±10%

\*2 Tolerance of measurements of dominant wavelength is ±1nm

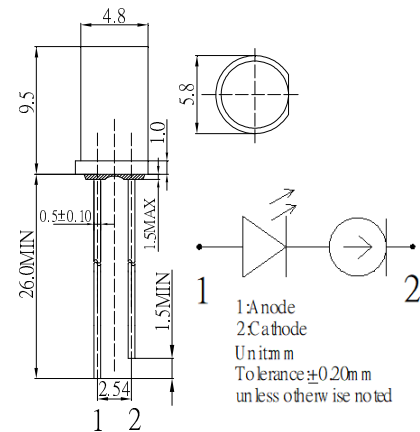
\*3 Tolerance of measurements of luminous intensity is ±15%

\*4 Tolerance of measurements of forward voltage is ±0.1V

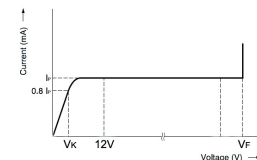
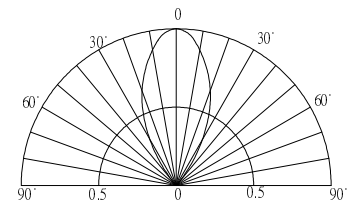
### ■ Applications

- Electronic Signs And Signals/ Small Area Illuminations
- Back Lighting/ Toys/ Other Lighting

### ■ Outline Dimension



### ■ Directivity

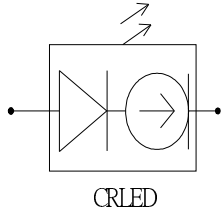


Explanation of terms  
I<sub>p</sub>: Pinch-off current at 12V  
V<sub>k</sub>: Voltage which produces 0.8Ip or greater current  
V<sub>r</sub>: Breakdown voltage

<b>Current Regulative LED</b>
<b>5mm Cylinder LED</b>
<b>OSXXXX5T51A-CRLED14</b>

■ **Typical Applications**

1: Single LED



2: Multi- LEDs in series

