

## CURRENT REGULATIVE LED

## ■ Outline Dimension

# 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

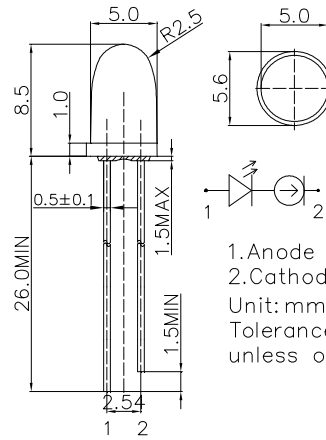
### ■ Features

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

### ■ Absolute Maximum Rating

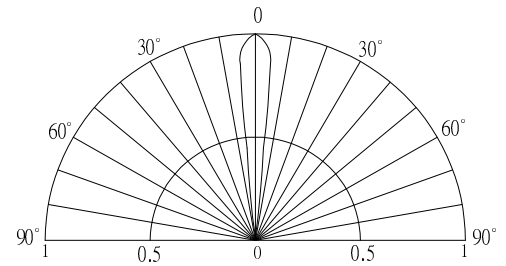
(Ta=25°C)

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	-



1. Anode  
2. Cathode  
Unit: mm  
Tolerance: ±0.20mm  
unless otherwise noted

### ■ Directivity



### ■ 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.
OSW5DK5201A-CRLED14	White	5.5	20		14	-	10	-	60000	-	X=0.27, Y=0.28(CCT:8500-18000)			8
OSM5DK5201A-CRLED14	Warm White	5.5	20		14	-	10	-	60000	-	X=0.44, Y=0.41(CCT:2700-3300)			8
OSB5SA5201A-CRLED14	Blue	5.5	20		14	-	10	-	10000	-	465	470	475	8
OSG5DA5201A-CRLED14	Pure Green	5.5	20		14	-	10	-	60000	-	520	525	530	8
OSY5PA5201A-CRLED14	Yellow	5	20		14	-	10	-	14400	-	585	590	595	8
OSO5PA5201A-CRLED14	Orange	5	20		14	-	10	-	14400	-	600	605	610	8
OSR5PA5201A-CRLED14	Red	5	20		14	-	10	-	14400	-	620	625	630	8

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

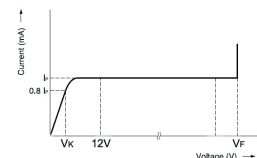
\*2 Tolerance of measurements of dominant wavelength is ±1nm

\*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

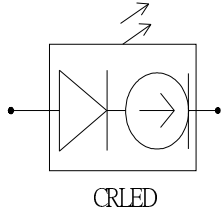


Explanation of terms  
I<sub>p</sub>: Pinch-off current at 12V  
V<sub>k</sub>: Voltage which produces 0.81p or greater current  
V<sub>F</sub>: Breakdown voltage

<b>Current Regulative LED</b>
<b>5mm Bullet LED</b>
<b>OSXXXX5201A-CRLED14</b>

■ **Typical Applications**

1 : Single LED



2 : Multi- LEDs in series

