

## 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

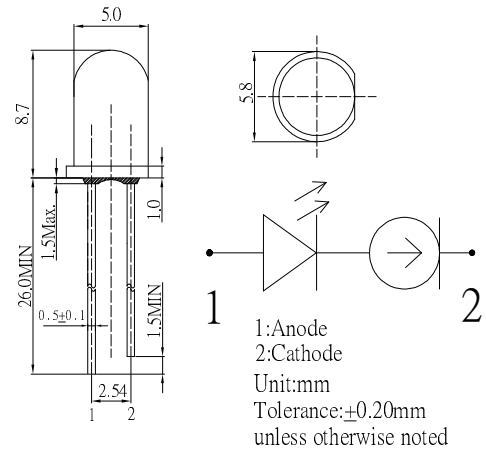
- High Luminous LEDs / 5mm Round Standard Directivity
- Superior Weather-resistance / UV Resistant Epoxy
- Water Clear Type

### ■ 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>	350	mW
Operating Temperature	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40~ +100	°C
Lead Soldering Temperature	Tsol	260°C/5sec	-

### ■ Outline Dimension



### ■ 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	Ma	Min	Typ.	Max.	Max..	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
		x.		V <sub>F</sub> =12V			V <sub>R</sub> =8V	V <sub>F</sub> =12V			V <sub>F</sub> =12V			
OSW5DK5A31A-CRLED16	White	5.5	20	-	16	-	10	-	10000	-	X=0.27, Y=0.28			30
OSM5DK5A31A-CRLED16	Warm White	5.5	20	-	16	-	10	-	7000	-	X=0.45, Y=0.41			30
OSK5DK5A31A-CRLED16	Pink	5.5	20	-	16	-	10	-	2180	-	X=0.45, Y=0.17			30
OSB64L5A31A-CRLED16	Ice Blue	5.5	20	-	16	-	10	-	8400	-	X=0.19, Y=0.29			30
OSB5SA5A31A-CRLED16	Blue	5.5	20	-	16	-	10	-	5800	-	465	470	475	30
OSG5DA5A31A-CRLED16	Pure Green	5.5	20	-	16	-	10	-	10000	-	520	525	530	30
OSY5PA5A31A-CRLED16	Yellow	5	20	-	16	-	10	-	7000	-	585	590	595	30
OSO5PA5A31A-CRLED16	Orange	5	20	-	16	-	10	-	7000	-	600	605	610	30
OSR5PA5A31A-CRLED16	Red	5	20	-	16	-	10	-	7000	-	620	625	630	30

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

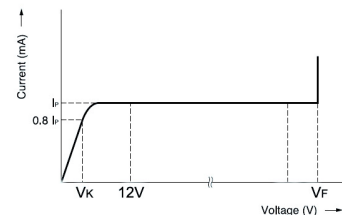
\*2 Tolerance of measurements of dominant wavelength is ±1nm

\*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

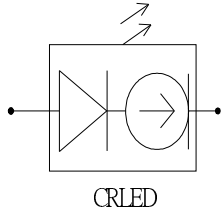


Explanation of terms  
I<sub>F</sub> Pinch-off current at 12V  
V<sub>K</sub> Voltage which produces 0.8I<sub>F</sub> or greater current  
V<sub>F</sub> Breakdown voltage

<b>Current Regulative LED</b>
<b>5mm Round LED</b>
<b>OSXXXX5A31A-CRLED16</b>
<b>VER A.3</b>

■ **Typical Applications**

1: Single LED



2: Multi- LEDs in series

