

## ■Description

This LED is built with two different or same color LEDs. It builds with resistors to operate with wide operation voltage of DC3-15V.

## ■Features

- Wide Input Voltage
- Cost Saving and Space Saving
- Water Clear Type
- Bi-color Common Anode Type
- Toys/Game/Audio
- TTL/Cmos Compatible
- Arduino/Steam Kit
- Other electronics products

## ■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V <sub>F</sub>	15	V
Reverse Voltage	V <sub>R</sub>	12	V
Power Dissipation	P <sub>D</sub>	190	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Lead Soldering Temperature	T <sub>sol</sub>	260°C/5sec	-

## ■Electrical -Optical Characteristics

(Ta=25°C)

Color	I <sub>F</sub> (mA)			I <sub>v</sub> (mcd)*			λD(nm)/CCT(K)*			θ1/2(deg)	
	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.	
V <sub>F</sub> =9V											
Red	-	7.5	-	-	2180	-	620	625	630	30	
Yellow	-	7.5	-	-	2180	-	585	590	595		
Blue	-	8.0	-	-	1560	-	465	470	475		
Pure Green	-	8.0	-	-	4200	-	520	525	530		
Cool White	-	8.0	-	-	4200		CCT:8500-18000K				
Warm White	-	8.0	-	-	4200	-	CCT:2700-3300K				

## ■Part Number

Color	Red	Yellow	Pure Green	Blue
Red	OSRRMA3131A-VV	OSRYMA3131A-VV	OSRPMA3131A-VV	OSRBMA3131A-VV
Yellow	OSRYMA3131A-VV	OSYYMA3131A-VV	OSYPMA3131A-VV	OSYBMA3131A-VV
Pure Green	OSRPMA3131A-VV	OSYPMA3131A-VV	OSPPDA3131A-VV	OSPBDA3131A-VV
Blue	OSRBMA3131A-VV	OSYBMA3131A-VV	OSPBDA3131A-VV	OSBBDA3131A-VV
Cool White	OSRWMA3131A-VV	OSYWMA3131A-VV	OSPWDA3131A-VV	OSBWDA3131A-VV
Warm White	OSRMMA3131A-VV	OSYMMMA3131A-VV	OSPMDA3131A-VV	OSBMDA3131A-VV

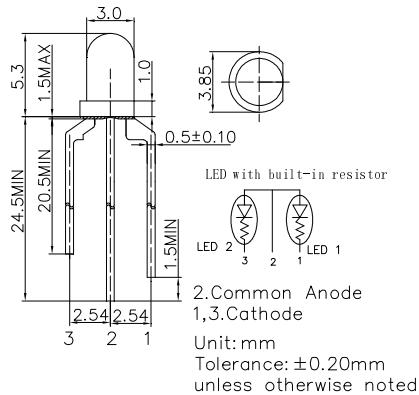
\*1 Tolerance of measurements of chromaticity coordinates is ±10%

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

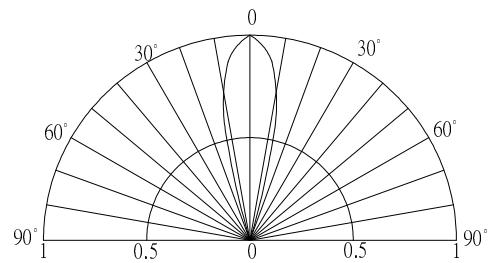
\*2 Tolerance of measurements of dominant wavelength is ±1nm

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

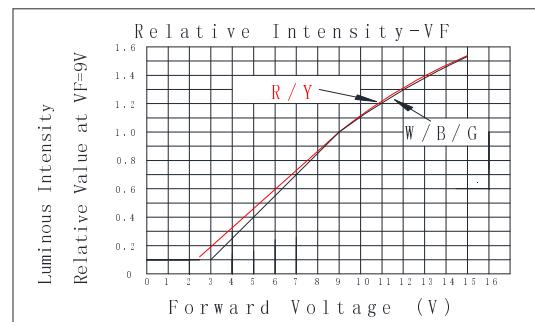
## ■Outline Dimension



## ■Directivity



## ■Optical Characteristic Curves



## LED & Application Technologies

