

■ Description

- LED Kit contains Multi-voltage DC3-15V LEDs
- 130pcs are supplied in a storage box for easy storage
- Wide input voltage range (3-15V)
- With built-in resistor, direct use
- Cost effective (save space and resistor cost)
- User-friendly
- Widely applied to project design, Arduino/Pi Pico/ Steam kit, TTL/Cmos compatible applications

■ Features

- 5mm round standard 30° directivity
- Red/Yellow/Blue/Pure Green/Cool White/
Bi-color Red&Blue/Red&Pure Green/RGB
- Color transparent type

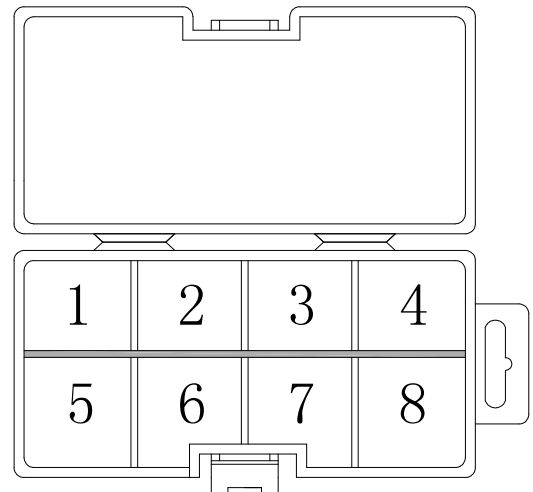
■ Product Picture

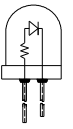
130pcs/Box (Dimensions: 137*68*28mm)



■ Kit Contents

Section	Contents	Pcs	P/N	Spec
1	5mm Multi-voltage LED, Red	20	OSR55133A-VV	Page 2
2	5mm Multi-voltage LED, Yellow	20	OSY55133A-VV	
3	5mm Multi-voltage LED Blue	20	OSB55133A-VV	
4	5mm Multi-voltage LED, Pure Green	20	OSG55133A-VV	
5	5mm Multi-voltage LED, Cool White	20	OSW55131A-VV	
6	5mm Bi-color Multi-voltage LED, Red/Blue	10	OSRBMC5A31A-VV	Page 3
7	5mm Bi-color Multi-voltage LED, Red/Pure Green	10	OSRPMC5A31A-VV	
8	5mm RGB Multi-voltage LED	10	OSTAMC5A31A-VV	Page 4

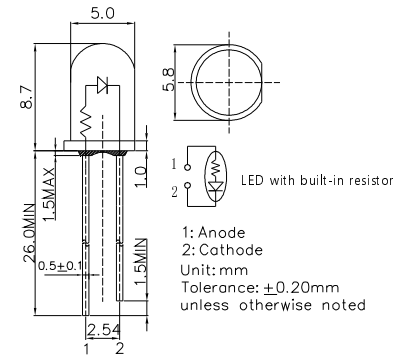




■Description

This LED builds with internal resistor to operate with wide operation voltage of DC3-15V.

■Outline Dimension



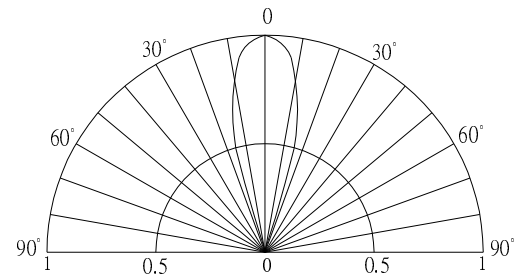
■Features

- Wide Input Voltage
- Cost Saving and Space Saving
- Color Transparent Type
- Single Color

■Applications

- Toys/Game/Audio
- TTL/Cmos Compatible
- Arduino/Pi Pico/Steam Kit
- Other Electronics Products

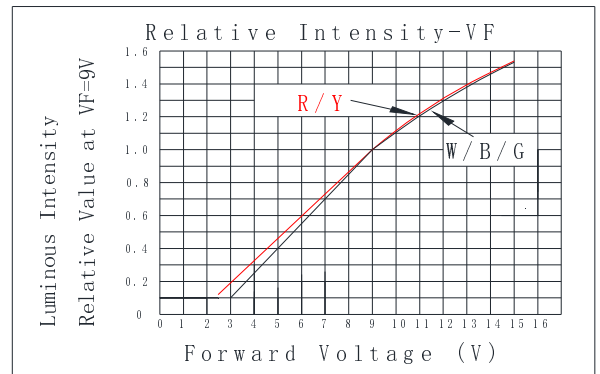
■Directivity



■Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	15	V
Reverse Voltage	V _R	12	V
Power Dissipation	P _D	190	mW
Operating Temperature	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40~ +100	°C
Lead Soldering Temperature	Tsol	260°C/5sec	-

■Optical Characteristic Curves



■Electrical -Optical Characteristics (Ta=25°C)

5mm Multi-Voltage LED					
LED P/N	OSR55133A-VV	OSY55133A-VV	OSB55133A-VV	OSG55133A-VV	OSW55131A-VV
Light Color	Red	Yellow	Blue	Pure Green	Cool White
Lens Color	Red Transparent	Yellow Transparent	Blue Transparent	Green Transparent	Water Clear
Wavelength*1/Color Temperature*2	620-630nm	585-595nm	465-475m	520-530nm	8500-18000K
Luminous Intensity(typ.)*3	3000mcd	3000mcd	2180mcd	5800mcd	5800mcd
Forward Voltage(typ.)	9V	9V	9V	9V	9V
Forward Current(typ.)	8mA	8mA	7.5mA	7.5mA	7.5mA
Viewing Angle(typ.)	30°	30°	30°	30°	30°
Quantity(pcs)/Box	20	20	20	20	20

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

*2 Tolerance of measurements of color temperature is ±10%

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

■ 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.

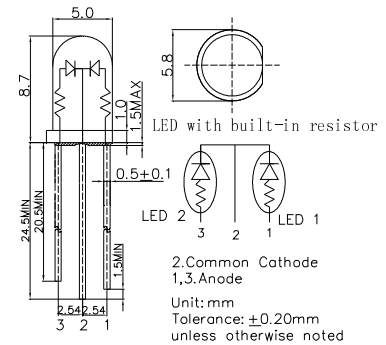
■ Features

- Wide Input Voltage
- Cost Saving and Space Saving
- Water Clear Type
- Bi-color Common Cathode Type

■ Applications

- Toys/Game/Audio
- TTL/Cmos Compatible
- Arduino/Pi Pico/Steam Kit
- Other Electronics Products

■ Outline Dimension

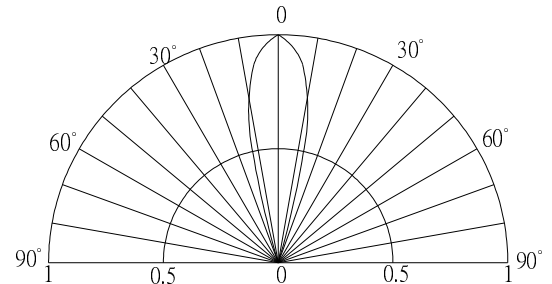


■ Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	15	V
Reverse Voltage	V _R	12	V
Power Dissipation	P _D	190	mW
Operating Temperature	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Lead Soldering Temperature	Tsol	260°C/5sec	-

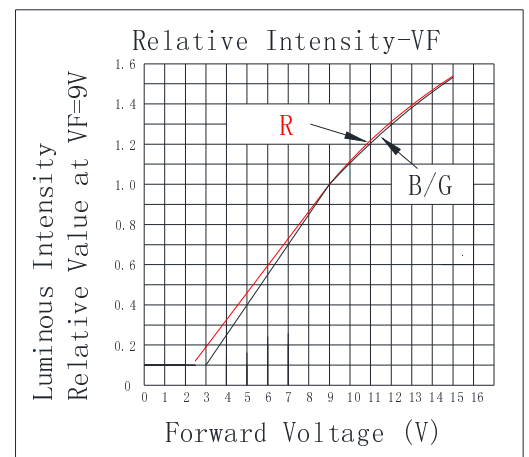
■ Directivity



■ Electrical -Optical Characteristics (Ta=25°C)

LED P/N	OSRBMC5A31A-VV		OSRPC5A31A-VV	
Light Color	Red	Blue	Red	Pure Green
Lens Color	Water Clear		Water Clear	
Wavelength*1	620-630nm	465-475m	620-630nm	520-530nm
Luminous Intensity(typ.)*2	3000mcd	2180mcd	3000mcd	5800mcd
Forward Voltage(typ.)*3	9V	9V	9V	9V
Forward Current(typ.)	8mA	7.5mA	8mA	7.5mA
Viewing Angle(typ.)	30°	30°	30°	30°
Quantity(pcs)/Box	10		10	

■ Optical Characteristic Curves



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

*2 Tolerance of measurements of luminous intensity is ±15%

*3 Tolerance of measurements of forward current ±1mA

■ Description

This RGB LED has three internal LEDs (Red, Green, and Blue) and three internal resistors that can be combined to deliver almost any color output with wide operation voltage of DC 3-15V.

■ Features

- Wide Input Voltage
- Cost Saving and Space Saving
- Water Clear Type
- Three-color Common Cathode Type

■ Applications

- Toys/Game/Audio
- TTL/Cmos Compatible
- Arduino/Pi Pico/Steam Kit
- Other Electronics Products

■ Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	15	V
Reverse Voltage	V _R	12	V
Power Dissipation	P _D	190	mW
Operating Temperature	T _{opr}	-30 ~ +85	°C
Storage Temperature	T _{stg}	-40~ +100	°C
Lead Soldering Temperature	T _{sol}	260°C/5sec	-

■ Electrical -Optical Characteristics (Ta=25°C)

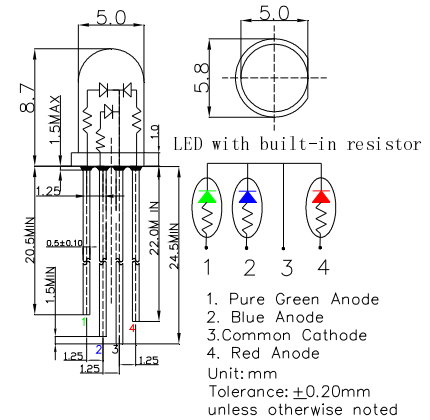
LED P/N	OSTAMC5A31A-VV		
Light Color	Red	Pure Green	Blue
Lens Color	Water Clear		
Wavelength*1	620-630nm	520-530nm	465-475nm
Luminous Intensity(typ.)*2	3000mcd	5800mcd	2180mcd
Forward Voltage(typ.)*3	9V	9V	9V
Forward Current(typ.)	8mA	7.5mA	7.5mA
Viewing Angle(typ.)	30°	30°	30°
Quantity(pcs)/Box	10		

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

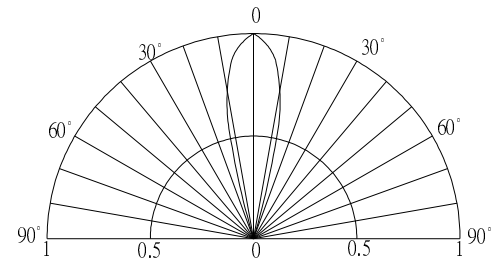
*2 Tolerance of measurements of luminous intensity is ±15%

*3 Tolerance of measurements of forward current ±1mA

■ Outline Dimension



■ Directivity



■ Optical Characteristic Curves

