

■Description

- LED Kit contains Multi-voltage DC3-15V LEDs, mounting clips and heat shrink tubes
- 306pcs 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)
- Supplied with accessories, user-friendly
- Widely applied to project design, Arduino/Pi Pico/ Steam kit, TTL/Cmos compatible applications

■Features

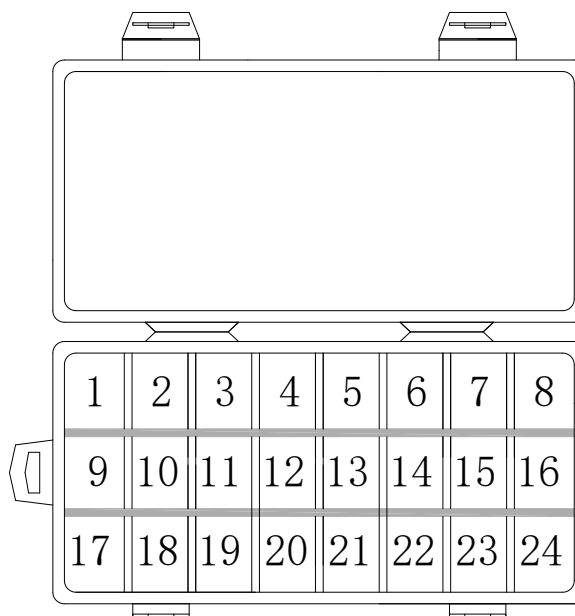
- 3mm/5mm/8mm round standard 40°/50°/60° directivity
- Red/Yellow/Blue/Pure Green/Warm White/Cool White
- Diffused type
- Single part clips for LED mounting
- Fitted with heat shrink tubing(UL-E329530)

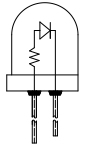
■Kit Contents

Section	Contents	Pcs	P/N	Spec
1	3mm Multi-voltage LED, Red	12	OSR53144A-VV	Page 2
2	3mm Multi-voltage LED, Yellow	12	OSY53144A-VV	
3	3mm Multi-voltage LED, Blue	12	OSB53144A-VV	
4	3mm Multi-voltage LED, Pure Green	12	OSG53144A-VV	
5	3mm Multi-voltage LED, Warm White	12	OSM53142A-VV	
6	3mm Multi-voltage LED, Cool White	12	OSW53142A-VV	
7	3mm LED Mounting Clip	12	OESC-3	Page5
8	Φ1.5mm Red Heat Shrink Tubing	24	OEHS1520RX	Page6
	Φ1.5mm Black Heat Shrink Tubing	24	OEHS1520BK	
9	5mm Multi-voltage LED, Red	12	OSR55154A-VV	Page3
10	5mm Multi-voltage LED, Yellow	12	OSY55154A-VV	
11	5mm Multi-voltage LED, Blue	12	OSB55154A-VV	
12	5mm Multi-voltage LED, Pure Green	12	OSG55154A-VV	
13	5mm Multi-voltage LED, Warm White	12	OSM55152A-VV	
14	5mm Multi-voltage LED, Cool White	12	OSW55152A-VV	
15	5mm LED Mounting Clip	12	OESC-5	Page5
16	Φ1.5mm Yellow Heat Shrink Tubing	12	OEHS1520YX	Page6
	Φ1.5mm Green Heat Shrink Tubing	12	OEHS1520GX	
17	8mm Multi-voltage LED, Red	6	OSR58164A-VV	Page4
18	8mm Multi-voltage LED, Yellow	6	OSY58164A-VV	
19	8mm Multi-voltage LED, Blue	6	OSB58164A-VV	
20	8mm Multi-voltage LED, Pure Green	6	OSG58164A-VV	
21	8mm Multi-voltage LED, Warm White	6	OSM58162A-VV	
22	8mm Multi-voltage LED, Cool White	6	OSW58162A-VV	
23	8mm LED Mounting Clip	6	OESC-8	Page5
24	Φ1.5mm Blue Heat Shrink Tubing	12	OEHS1520BX	Page6
	Φ1.5mm White Heat Shrink Tubing	12	OEHS1520WX	

■ Product Picture

306pcs/Box (Dimensions: 195*130*36mm)

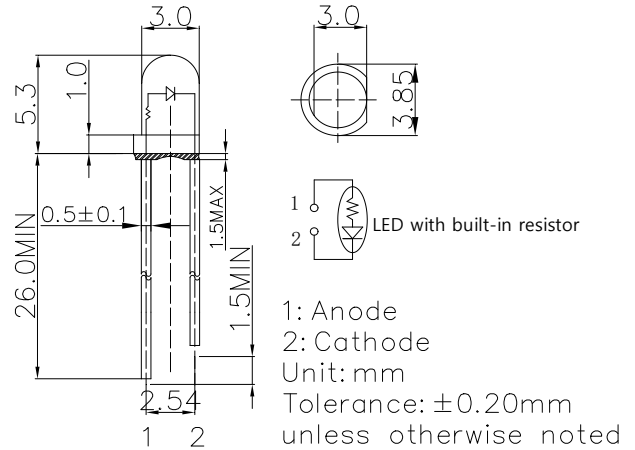




■Description

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

■Outline Dimension



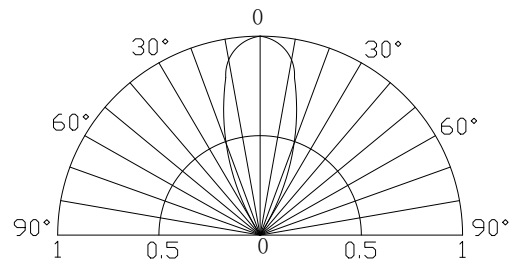
■Features

- Wide Input Voltage
- Cost Saving and Space Saving
- Diffused type
- Single Color

■Applications

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

■Directivity

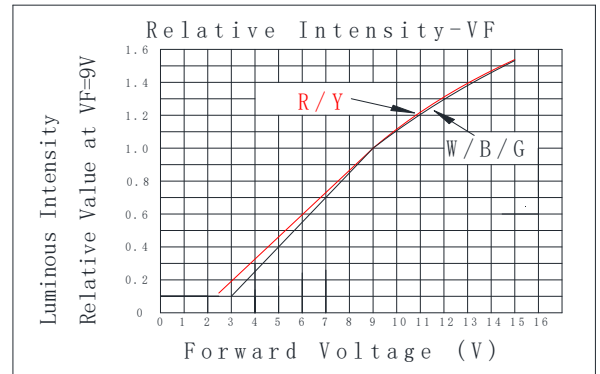


■Absolute Maximum Rating

(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

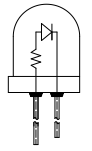
(Ta=25°C)

3mm Multi-Voltage LED						
LED P/N	OSR53144A-VV	OSY53144A-VV	OSB53144A-VV	OSG53144A-VV	OSM53142A-VV	OSW53142A-VV
Light Color	Red	Yellow	Blue	Pure Green	Warm White	Cool White
Lens Color	Red Diffused	Yellow Diffused	Blue Diffused	Green Diffused	White Diffused	White Diffused
Wavelength*1/Color Temperature*2	620-630nm	585-595nm	465-475nm	520-530nm	2700-3300K	8500-18000K
Luminous Intensity(typ.)*3	400mcd	400mcd	300mcd	1560mcd	1560mcd	1560mcd
Forward Voltage(typ.)	9V	9V	9V	9V	9V	9V
Forward Current(typ.)	8mA	8mA	7.5mA	7.5mA	7.5mA	7.5mA
Viewing Angle(typ.)	40°	40°	40°	40°	40°	40°
Quantity(pcs)/Box	12	12	12	12	12	12

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

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

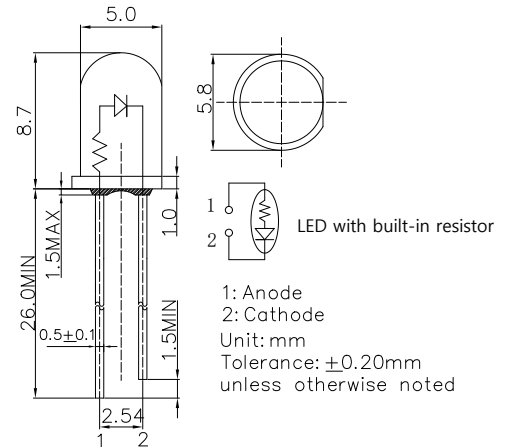
*3 Tolerance of measurements of luminous intensity is ±15%



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■Outline Dimension



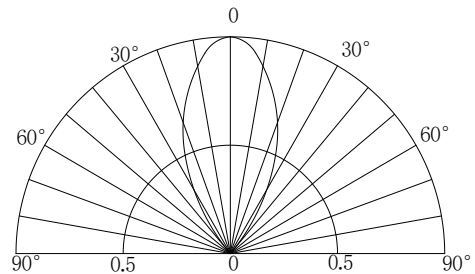
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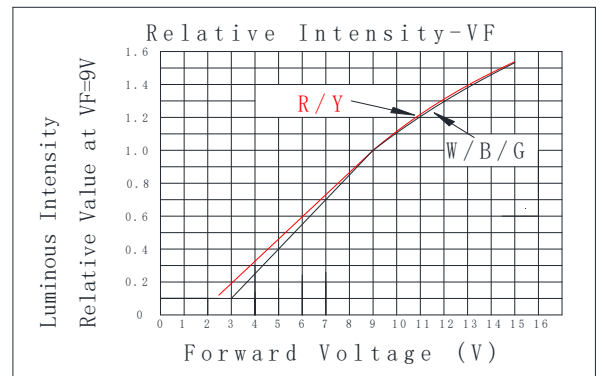


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■Electrical -Optical Characteristics

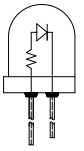
(Ta=25°C)

5mm Multi-Voltage LED						
LED P/N	OSR55154A-VV	OSY55154A-VV	OSB55154A-VV	OSG55154A-VV	OSM55152A-VV	OSW55152A-VV
Light Color	Red	Yellow	Blue	Pure Green	Warm White	Cool White
Lens Color	Red Diffused	Yellow Diffused	Blue Diffused	Green Diffused	White Diffused	White Diffused
Wavelength*1/Color Temperature*2	620-630nm	585-595nm	465-475m	520-530nm	2700-3300K	8500-18000K
Luminous Intensity(typ.)*3	220mcd	220mcd	150mcd	750mcd	750mcd	750mcd
Forward Voltage(typ.)	9V	9V	9V	9V	9V	9V
Forward Current(typ.)	8mA	8mA	7.5mA	7.5mA	7.5mA	7.5mA
Viewing Angle(typ.)	50°	50°	50°	50°	50°	50°
Quantity(pcs)/Box	12	12	12	12	12	12

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

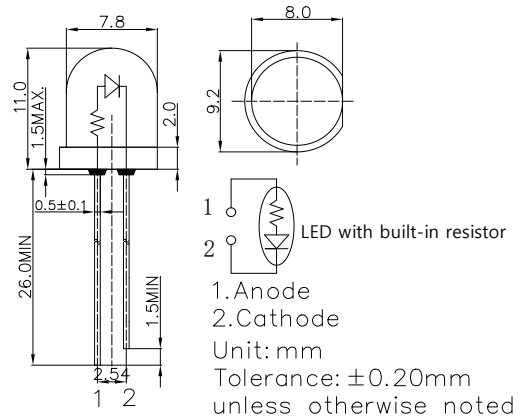
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This LED builds with internal resistor to operate with wide operation voltage of DC3-15V.

■Outline Dimension



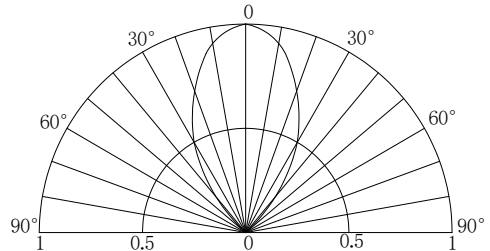
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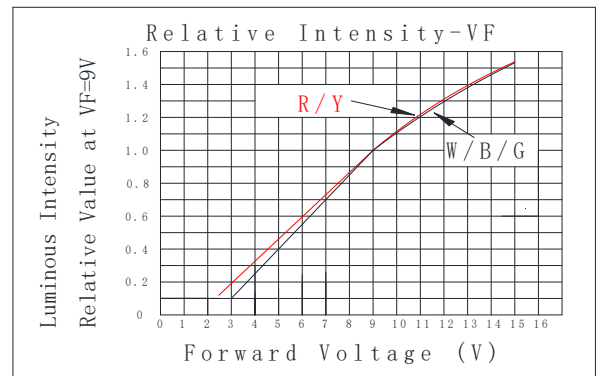


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Lead Soldering Temperature	Tsol	260°C/5sec	-

■Optical Characteristic Curves



■Electrical -Optical Characteristics

(Ta=25°C)

8mm Multi-Voltage LED						
LED P/N	OSR58164A-VV	OSY58164A-VV	OSB58164A-VV	OSG58164A-VV	OSM58162A-VV	OSW58162A-VV
Light Color	Red	Yellow	Blue	Pure Green	Warm White	Cool White
Lens Color	Red Diffused	Yellow Diffused	Blue Diffused	Green Diffused	White Diffused	White Diffused
Wavelength*1/Color Temperature*2	620-630nm	585-595nm	465-475m	520-530nm	2700-3300K	8500-18000K
Luminous Intensity(typ.)*3	150mcd	150mcd	100mcd	400mcd	400mcd	400mcd
Forward Voltage(typ.)	9V	9V	9V	9V	9V	9V
Forward Current(typ.)	8mA	8mA	7.5mA	7.5mA	7.5mA	7.5mA
Viewing Angle(typ.)	60°	60°	60°	60°	60°	60°
Quantity(pcs)/Box	6	6	6	6	6	6


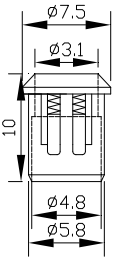

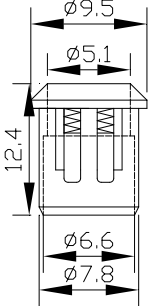

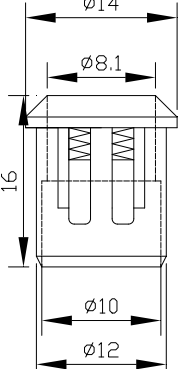
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*2 Tolerance of measurements of color temperature is ±10%

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

Material	NYLON66
Color	Black
Fireproofing Grade	94V-2

■Product Information & Outline Dimension:

Item	Clip P/N	Product Picture	Outline Dimension
3mm LED Mounting Clip	OESC-3		 <p>Unit: mm Tolerance: ±0.30mm unless otherwise noted</p>
5mm LED Mounting Clip	OESC-5		 <p>Unit: mm Tolerance: ±0.30mm unless otherwise noted</p>
8mm LED Mounting Clip	OESC-8		 <p>Unit: mm Tolerance: ±0.30mm unless otherwise noted</p>

Heat shrink tubing is a flexible, flame retardant and halogen-free polyolefin tubing used for electrical insulation. Heat shrink is UL recognised at 600V and is free of Lead, Cadmium, Mercury, Hexavalent Chromium, Polybrominated biphenyl and Polybrominated diphenyl ethers.

It has an operating temperature of 125°C and a shrink temperature of 90°C. Can be used in any enclosed area where a flame-retardant, halogen-free environment is required.

Features

- Flame retardant
- Halogen free

Technical Information

Material: Polyolefin heat shrink

Colour: Yellow/Green, Black, White, Blue, Red, Clear



Technical Data		Units	Value
Radial shrinking ratios		%	≥50
Longitudinal change		%	≥1±5
Tensile strength		MPa	≥10.4
Elongation break		%	≥200
Aging in circular-air oven		°C	158.0°C±1.0°C, 168hrs
After aging	Tensile strength	MPa	≥7.3
	Elongation at break	%	≥100
Volume resistivity		Ω.cm	≥1014
Dielectric strength at 1min, AC2500V		-	No breakdown
Heat shock		-	No cracking
Flammability		-	VW-1
Concentricity		%	≥70
UL NO.		-	E329530

Applications

- Electrical insulation
- Wire protection
- Other fields requiring protection in harsh environments

Heat Shrink Tubing						
P/N	OEHS1520RX	OEHS1520YX	OEHS1520BX	OEHS1520GX	OEHS1520WX	OEHS1520BK
Color	Red	Yellow	Blue	Green	White	Black
Size	Φ1.5x20±3mm	Φ1.5x20±3mm	Φ1.5x20±3mm	Φ1.5x20±3mm	Φ1.5x20±3mm	Φ1.5x20±3mm
Quantity(pcs)/Box	24	12	12	12	12	24