

Item no.: 2860443

Data Sheet

3 mm & 5 mm LED Kit

Description

- LED Kit contains LEDs, resistors and mounting clips
- 560 pcs are supplied in a storage box
- Easy to use and storage
- Widely applied to DIY projects, school science experiments, car decorations, etc.

Features

- 3 mm & 5 mm round standard 30° directivity
- UV resistant epoxy
- Red/Yellow/Yellow Green/Blue/Warm White/Cool White
- Color diffused/Water clear
- Resistors are used to limit current flow
- Single part clips for mounting

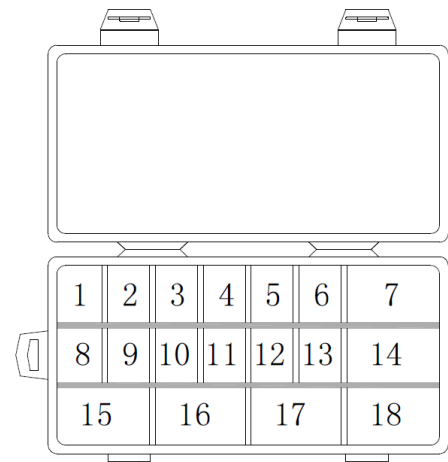
Product Picture

560 pcs/Box (Dimensions: 191 x 130 x 36 mm)



Kit Contents

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Description

- 3 mm & 5 mm round standard 30° directivity
- UV resistant epoxy
- Available in all colors
- Color diffused/Water clear

Applications

- General purpose indicators
- Small area illuminations
- Christmas light
- Backlighting

Technical data

Absolute Maximum Rating (Ta=25 °C)

Item	Symbol	Value		Unit
		B/M/W	R/Y/YG	
DC Forward Voltage	I_F	30	30	mA
Pulse Forward Current#	I_{FP}	100	100	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	102	72	mW
Operating Temperature	T_{opr}	-30 ~ +85		°C
Storage Temperature	T_{stg}	-40 ~ +100		°C
Lead Soldering Temperature	T_{sol}	260 °C /5 sec		-

Pulse width Max. 10 ms, Duty ratio max 1/10

Electrical-Optical Characteristics (Ta=25 °C)

3 mm LED	Red	Yellow	Yellow Green	Blue	Warm White	Cool White
Light Color	Red	Yellow	Yellow Green	Blue	Warm White	Cool White
Lens Color	Red Diffused	Yellow Diffused	Green Diffused	Blue Diffused	Water Clear	Water Clear
Wavelength*1/Color Temperature*2	620-640 nm	585-595 nm	565-575 nm	462.5-472.5 nm	2700-3300 K	8500-18000 K
Luminous Intensity(typ.)*3	330 mcd	420 mcd	55 mcd	2500 mcd	14400 mcd	14400 mcd
Forward Voltage*4	1.8-2.4 V	1.8-2.4 V	1.8-2.4 V	2.7-3.4 V	2.7-3.4 V	2.7-3.4 V
Forward Current	20 mA	20 mA	20 mA	20 mA	20 mA	20 mA
Viewing Angle(typ.)	30°	30°	30°	30°	30°	30°
Quantity(pcs)/Box	20	20	20	20	20	20

5 mm LED	Red	Yellow	Yellow Green	Blue	Warm White	Cool White
Light Color	Red	Yellow	Yellow Green	Blue	Warm White	Cool White
Lens Color	Red Diffused	Yellow Diffused	Green Diffused	Blue Diffused	Water Clear	Water Clear
Wavelength*1/Color Temperature*2	620-640 nm	585-595 nm	565-575 nm	462.5-472.5 nm	2700-3300 K	8500-18000 K
Luminous Intensity(typ.)*3	420 mcd	420 mcd	90 mcd	2180 mcd	19000 mcd	19000 mcd
Forward Voltage*4	1.8-2.4 V	1.8-2.4 V	1.8-2.4 V	2.7-3.4 V	2.7-3.4 V	2.7-3.4 V
Forward Current	20 mA	20 mA	20 mA	20 mA	20 mA	20 mA
Viewing Angle(typ.)	30°	30°	30°	30°	30°	30°
Quantity(pcs)/Box	20	20	20	20	20	20

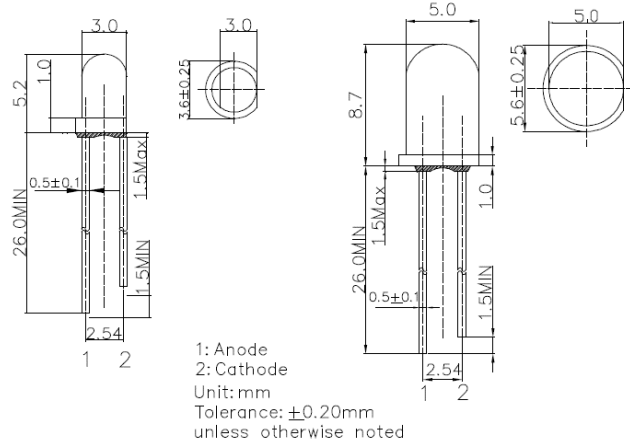
*1 Tolerance of measurements of dominant wavelength is ± 1 nm

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

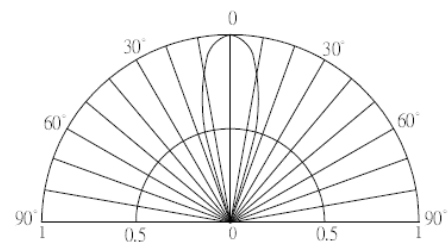
*3 Tolerance of measurements of luminous intensity is ± 15%

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

Outline Dimensions



Directivity



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LED Mounting Clip

Material: NYLON66

Color: Black

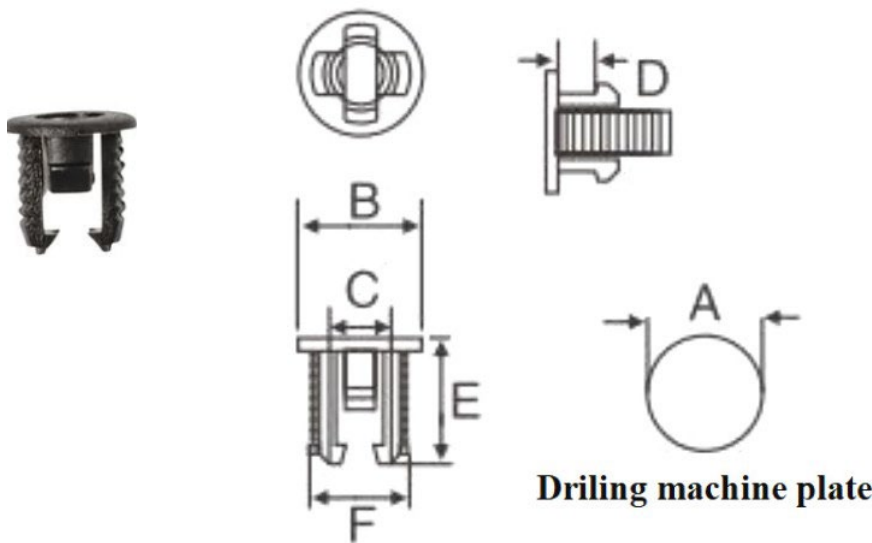
Fireproofing grade: 94V-2

Tolerance: ± 0.2 mm

Product Information & Outline Dimensions:

Item	A	B	C	D	E	F
3 mm LED Mounting Clip	$\Phi 4.5$	$\Phi 6.0$	$\Phi 3.1$	1.4	6.0	$\Phi 4.4$
5 mm LED Mounting Clip	$\Phi 6.4$	$\Phi 7.8$	$\Phi 5.1$	1.5	7.5	$\Phi 6.0$

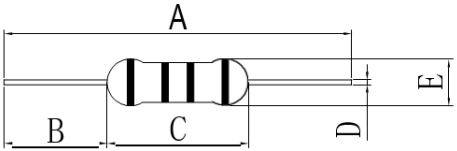
Unit: mm



Data Sheet

Carbon Film Resistor

Specifications

Power Rating	Maximum Working Voltage	Maximum Overload Voltage	Dimension (mm)					Resistance Range
			A	B	C	D	E	
1/4 W	250 V	500 V						220 Ω 470 Ω 680 Ω 1000 Ω
			45±3	19.5±3	6.0±1	0.35±0.1	2.3±0.3	

Color Coding

Color	1 st digit	2 nd digit	Multiplier	Tolerance
Black	0	0	1 Ω	
Silver			0.01 Ω	±10%
Golden			0.1 Ω	±5%
Brown	1	1	10 Ω	±1%
Red	2	2	100 Ω	±2%
Orange	3	3	1 KΩ	
Yellow	4	4	10 KΩ	
Green	5	5	100 KΩ	±0.5%
Blue	6	6	1 MΩ	±0.25%
Violet	7	7	10 MΩ	±0.1%
Gray	8	8		
White	9	9		

