

Data Sheet

3 mm LED Kit

Description

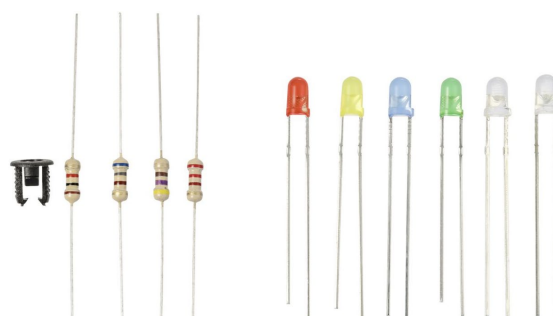
- LED Kit contains LEDs, resistors and mounting clips
- 280 pcs are supplied in a storage box
- Easy to use and storage
- Widely applied to DIY projects, school science experiments, car decorations, etc.

Features

- 3 mm 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

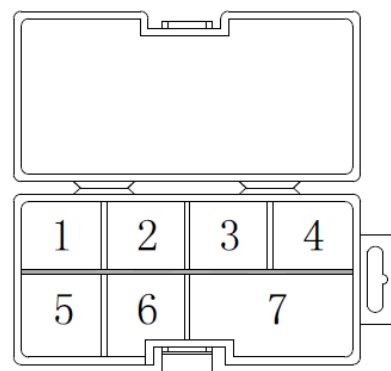
Product Picture

280 pcs/Box (Dimensions: 137 x 68 x 28 mm)



Kit Contents

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	220 Ω Carbon Film Resistor, 0.25 W $\pm$ 0.5%	30	Page 4
	470 Ω Carbon Film Resistor, 0.25 W $\pm$ 0.5%	30	
	680 Ω Carbon Film Resistor, 0.25 W $\pm$ 0.5%	30	
	1000 Ω Carbon Film Resistor, 0.25 W $\pm$ 0.5%	30	



Data Sheet

3 mm Standard LED

Description

- 3 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						
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

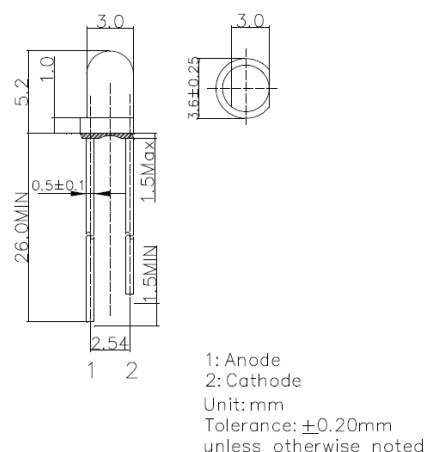
*1 Tolerance of measurements of dominant wavelength is ± 1 nm

*2 Tolerance of measurements of color temperature is $\pm 10\%$

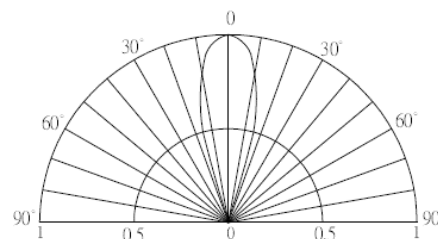
*3 Tolerance of measurements of luminous intensity is $\pm 15\%$

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

Outline Dimensions



Directivity



Item no.: 2860441

Data Sheet

LED Mounting Clip

Material: NYLON66

Color: Black

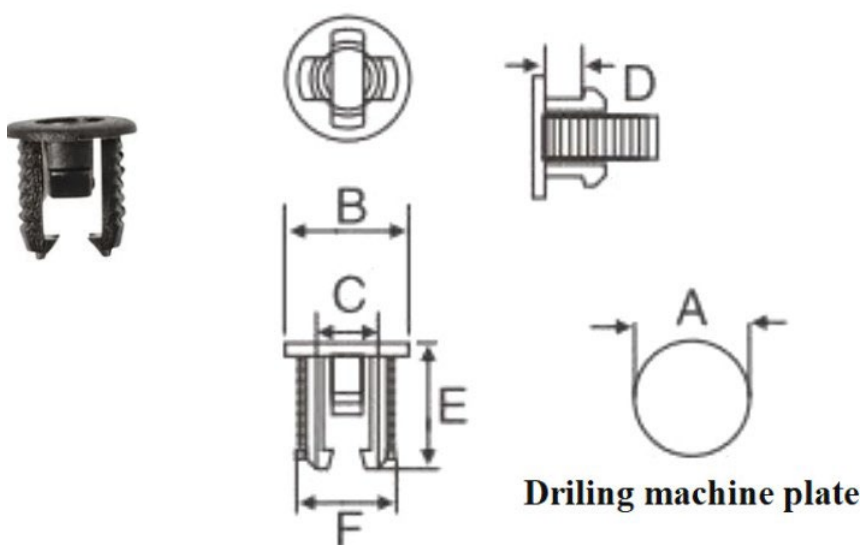
Fireproofing grade: 94V-2

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	45±3	19.5±3	6.0±1	0.35±0.1	2.3±0.3	0.1E-22M

Color Coding

Color	1 st digit	2 nd digit	Multiplier	Tolerance
Black	0	0	1Ω	
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		

