

AE281 LED Light Emitting Diode Kit Specifications

Product Model: 3mm & 5mm LED Bead Kit (375 pcs)

Packaging: Plastic Storage Box

1. Product Overview

This **375- piece LED light-emitting diode kit** includes 3mm and 5mm round-head high-brightness LEDs in five colors: red, yellow, green, white, and blue. It is suitable for DIY production, electronic experiments, teaching and training, lighting, and decorative applications.

LED lamp beads are semiconductor devices that can directly convert electrical energy into light energy. They have the advantages of high efficiency and energy saving, long life, small size and fast response. They are widely used in lighting, decoration, display and electronic products.



2. Product Parameters

2.1 Kit Configuration

- Total quantity: 375 pcs
- Colors: red, yellow, green, white, blue
- Size: 3mm & 5mm
- Packaging: Storage box

(1) 3mm Red = 50 pcs

(2) 5mm Red = 25pcs

(3) 3mm Green = 50pcs

(4) 5mm Green = 25pcs

(5) 3mm Yellow = 50 pcs

(6) 5mm Yellow = 25 pcs

(7) 3mm Blue = 50pcs

(8) 5mm Blue = 25pcs

(9) 3mm White=50pcs

(10) 5mm White = 25pcs

2.2 Detailed parameters

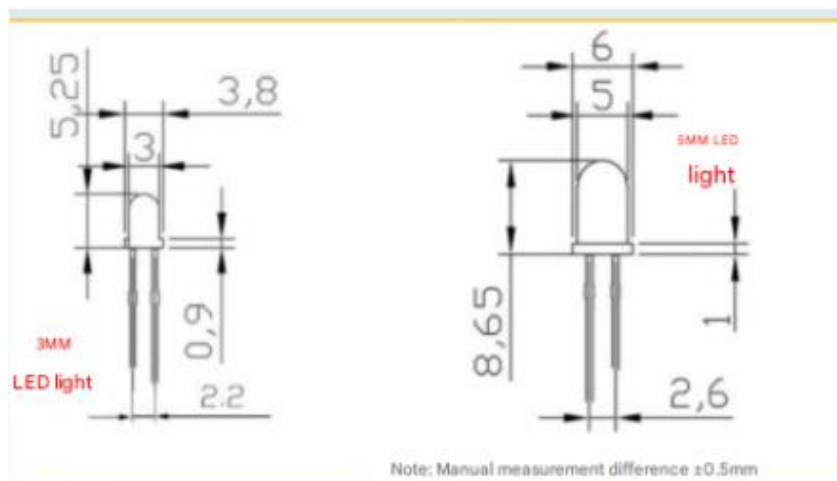
color	size	Wavelength (nm)	Forward voltage (V)	Forward current (mA)	Brightness (mcd)	Lens Color	quantity
red	3mm	620 - 630	1.9 - 2.1	20	3000 - 4000	red	50 pcs
red	5mm	620 - 630	2.8 - 3.1	20	4000 - 5000	red	25 pcs
yellow	3mm	580 - 590	1.9 - 2.1	20	5000 - 6000	yellow	50 pcs

color	size	Wavelength (nm)	Forward voltage (V)	Forward current (mA)	Brightness (mcd)	Lens Color	quantity
yellow	5mm	580 - 590	2.8 - 3.1	20	4000 - 5000	yellow	25 pcs
green	3mm	570 - 573	3.2 - 3.4	20	10,000 - 12,000	Green and transparent	50 pcs
green	5mm	570 - 573	3.0 - 3.4	20	12000 - 14000	Green and transparent	25 pcs
White	3mm	610 - 620	1.8 - 2.2	20	3000 - 4000	transparent	50 pcs
White	5mm	500 - 620	3.0 - 3.2	20	12000 - 14000	transparent	25 pcs
blue	3mm	460 - 470	3.2 - 3.4	20	3000 - 4000	blue transparent	50 pcs
blue	5mm	460 - 470	3.0 - 3.4	20	5000 - 6000	blue transparent	25 pcs

3. Package Dimensions

3mm LED : 3mm diameter

5mm LED : 5mm diameter



4. Features



- Long service life: up to $\geq 50,000$ hours
- Fast response and stable luminescence
- Environmentally friendly: does not contain mercury, lead and other harmful substances, compliant with RoHS standards
- Low voltage drive, safe and reliable
- Available in multiple colors, suitable for DIY/teaching/decoration/experimentation and other scenarios

5. Typical Applications

- **Lighting** : bulb lamps, downlights, spotlights, panel lights, street lights, garden lights
- **Decoration and landscape** : festival lights, advertising light boxes, LED light strips, architectural decorations
- **Automotive lighting** : taillights, brake lights, turn signals, instrument panel backlights
- **Electronic products** : display screens, LCD backlights, mobile phone/TV backlights
- **Other uses** : traffic lights, medical beauty, plant growth lights, DIY

6. Precautions

1. Welding requirements:

Single soldering time <3 seconds, soldering iron temperature $\leq 350^{\circ}$ C

Avoid excessive pressure on the LED

2. Storage conditions:

Unopened: Temperature $\leq 30^{\circ}$ C, Humidity < 90% Opened: Use within 7 days, or bake

3. Anti-static protection: Wear an anti-static wristband during operation to avoid touching the chip with your hands

4. Heat dissipation requirements: Avoid long-term overcurrent operation, high-power LEDs need to be equipped with heat sinks