

# Product Specification

Number: L-KLS6-3526

Name: Photosensitive resistors

Customer: \_\_\_\_\_

Date: 2025-09-12

Customer Signature:



**NINGBO KLS ELECTRONIC CO; LTD**

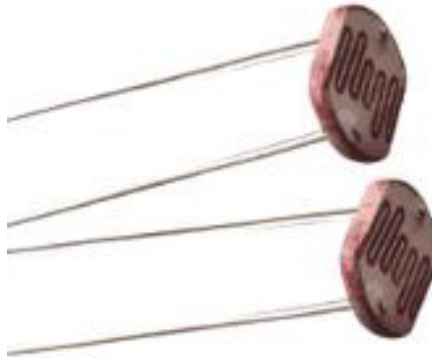
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Jenny	Jack.C		

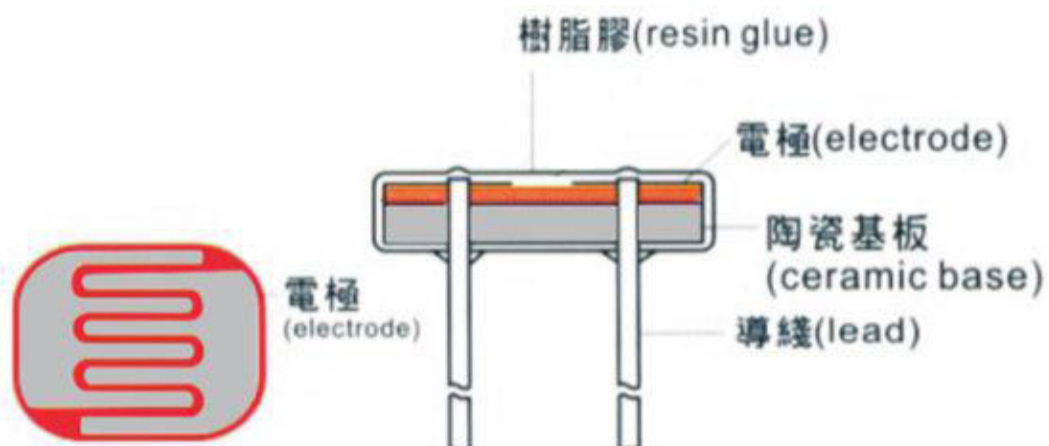
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## Photoresistor

A photoresistor is a type of resistor whose resistance decreases with increasing incident light intensity; in other words, it exhibits photoconductivity. Photoresistors are made of semiconductor materials and are widely used in various industries such as toys, lighting, and cameras.

## Structural Diagram



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## Performance and Features

**Epoxy resin encapsulation**

**Good reliability**

**Small size**

**High sensitivity**

**Fast response time**

**Good spectral characteristics**

## Applications Range

**Applications**

**Photoelectric control**

**Indoor light control**

**Alarm**

**Industrial control**

**Light-controlled switches**

**Light-controlled lamps**

**Electronic toys**

## Model and Specifications

Specifications	Model	Maximum Voltage	Maximum Power Dissipation	Ambient Temperature	Spectral Peak	Light Resistance	Dark Resistance	$\gamma$ 100	Response Time (ms)		Illuminance-Resistance Characteristic Curve Number
		VDC	mW	(°C)	nm	10Lux (K $\Omega$ )	(M $\Omega$ )	10	Rise	Fall	
<b>KLS6</b>	3516	100	50	-30 ~ +70	540	5-10	0.6	0.5	30	30	2
	3526	100	50	-30 ~ +70	540	10-20	1	0.6	30	30	3
	3537-1	100	50	-30 ~ +70	540	20-30	2	0.6	30	30	4
	3537-2	100	50	-30 ~ +70	540	30-50	3	0.7	30	30	4
	3547-1	100	50	-30 ~ +70	540	50-100	5	0.8	30	30	5
	3547-2	100	50	-30 ~ +70	540	100-200	10	0.9	30	30	6

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## Test Conditions

**Maximum Applied Voltage:**

The maximum voltage that can be continuously applied to the component in darkness.

**Dark Resistance:**

The resistance value at the 10th second after the light is turned off at 10 Lux.

**Maximum Power Dissipation:**

The maximum power dissipation at an ambient temperature of 25°C.

**Light Resistance:**

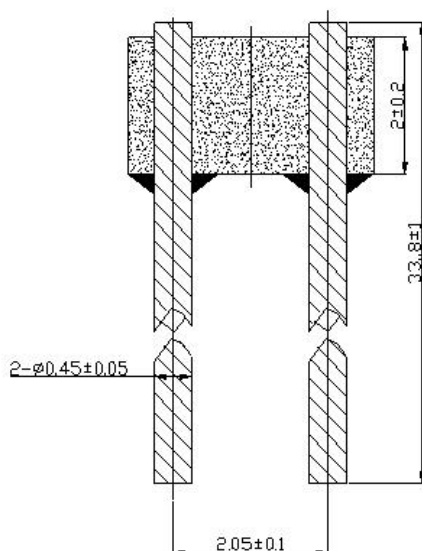
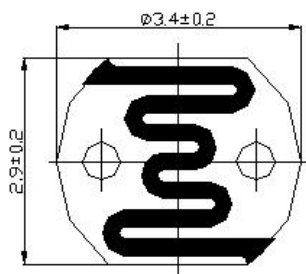
The test value under standard light source (color temperature 2856K) at 10 Lux after irradiation with 400-600 Lux light for 2 hours.

 **$\gamma$  Value:**

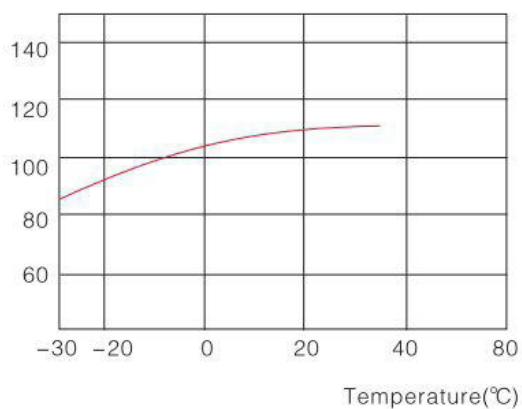
The logarithm of the ratio of the standard resistance values at 10 Lux and 100 Lux illuminance.

**R10 and R100 are the resistance values at 10 Lux and 100 Lux illuminance respectively (the tolerance of  $\gamma$  is  $\pm 0.1$ ).**

## Outline Dimensions and Main Characteristic Curves

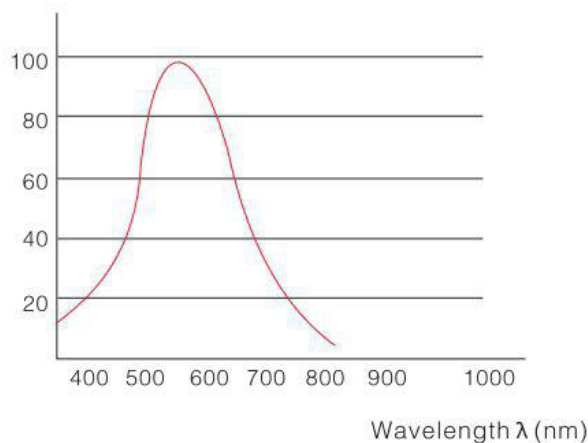


Relative Resistance(%)  
電阻變化率 ( % )



Temperature-Property 溫度特性曲線

Relative Response(%)  
相對靈敏度 ( % )



Spectrum Response Characteristic 光譜回應特性曲線

## Illuminance-Resistance Characteristic Curve

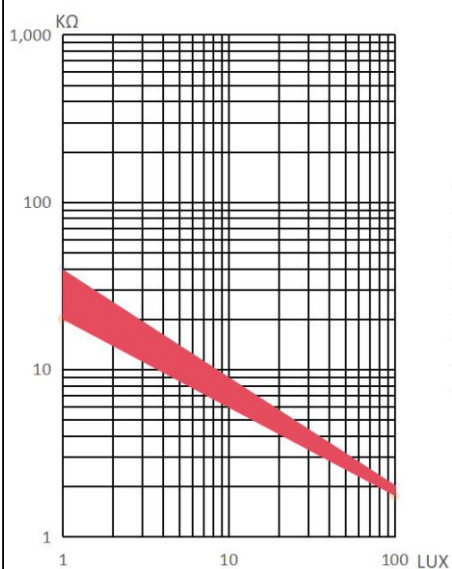


Fig.1

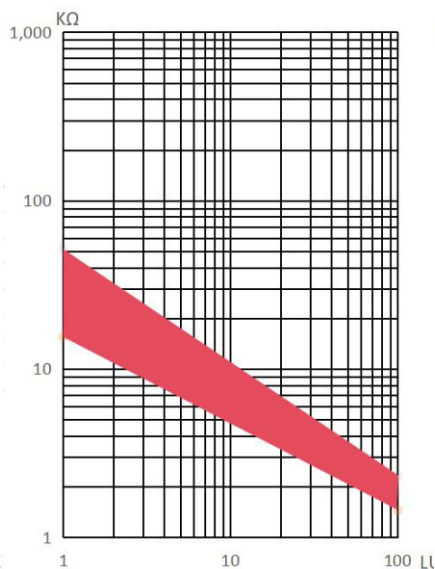


Fig.2

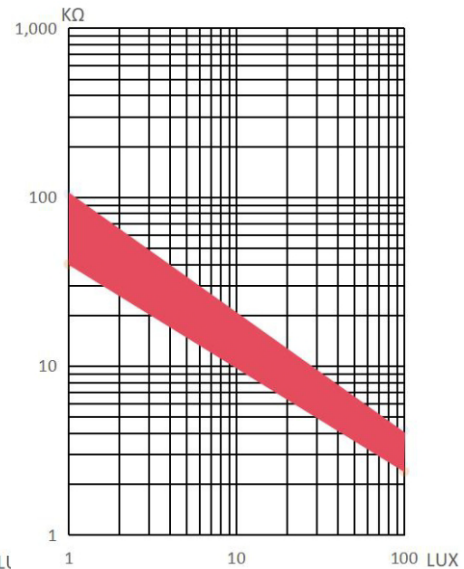


Fig.3

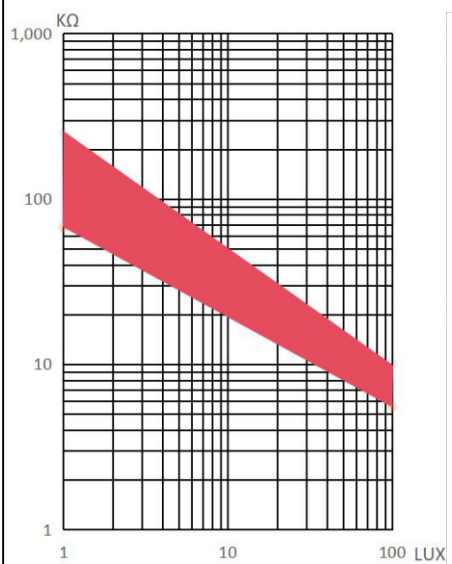


Fig.4

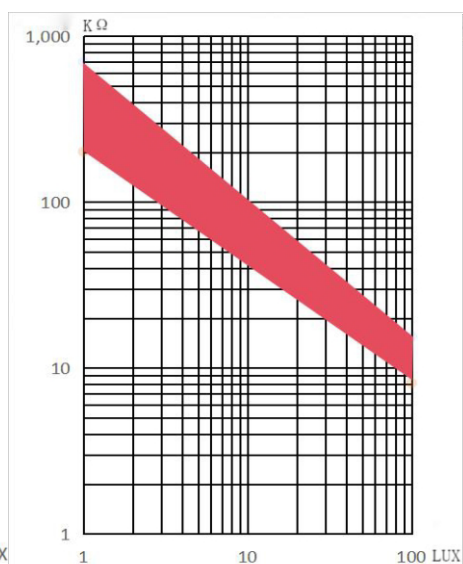


Fig.5

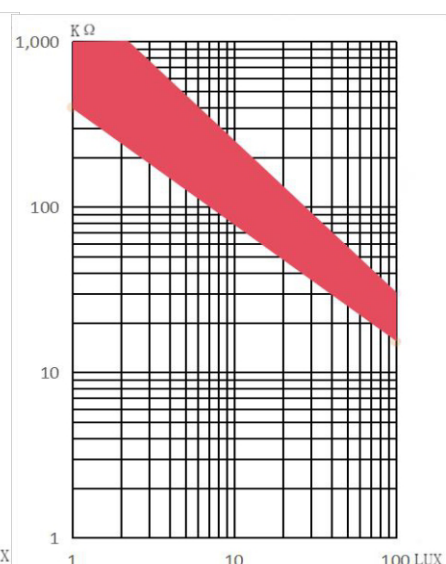


Fig.6

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## Product Applications



## Packaging and Precautions

- Small packaging: 200 pieces; Large packaging: 2000 pieces
- Avoid storing the photoresistor in damp and high-temperature environments.
- Recommended lead soldering should be at a distance of  $\geq 4\text{mm}$  from the ceramic base, ensuring the soldering temperature is between  $260^{\circ}\text{C}$  and  $280^{\circ}\text{C}$  and completed within 3 seconds. Do not exceed the rated range. Avoid applying external force to the leads during or after soldering. Do not re-solder.

Note: KLS Sensor reserves the right to make changes, corrections, enhancements, modifications, and improvements to the product specification sheet at any time without prior notice.