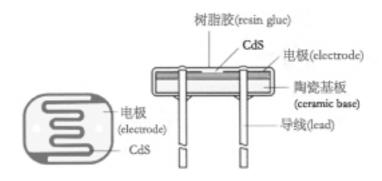
GL55 Series Photoresistor

Photoresistor is a resistor which made of semi-conductor material, and the conductance changes with luminance variation . The photoresistor can be manufactured with different figures and illuminated area based on this characteristic. Photoresistor is widely used in many industries, such as toys, lamps, camera, etc.

Schematic Drawing



Performances and Features

Coated with epoxy Good reliability
Small volume High sensitivity

Fast response Good spectrum characteristic

Typical Applications

Camera automatic photometry Photoelectric control

Indoor ray control Annunciator

Industrial control Light control switch

Light control lamp Electronic toy

Types and Specifications

Specification	Туре	Max.	Max.	Environmental	Spectrum
	J.	Voltage	power	temp.	peak value
Φ5 series	GL5516	150	90	-30~+70	540
	GL5528	150	100	-30~+70	540
	GL5537-1	150	100	-30~+70	540
	GL5537-2	150	100	-30~+70	540
	GL5539	150	100	-30~+70	540
	GL5549	150	100	-30~+70	540

Specification	Light resistance	Dark resistance (MΩ)	γ ¹⁰⁰	Response time (ms)		Illuminance resistance
	(10Lux) (KΩ)			Increase	Decrease	Fig. No.
	5-10	0.5	0.5	30	30	2
	10-20	1	0.6	20	30	3
Ф5	20-30	2	0.6	20	30	4
series	30-50	3	0.7	20	30	4
	50-100	5	0.8	20	30	5
	100-200	10	0.9	20	30	6

Test Conditions

Max. external voltage: Maximum voltage to be continuously given to component in the dark.

Dark resistance: Refer to the resistance ten seconds after the 10Lux light is shut up.

Max. power consumption: Maximum power at the environmental temperature 25℃.

Light resistance: Irradiated by 400-600Lux light for two hours, then test with 10Lux under

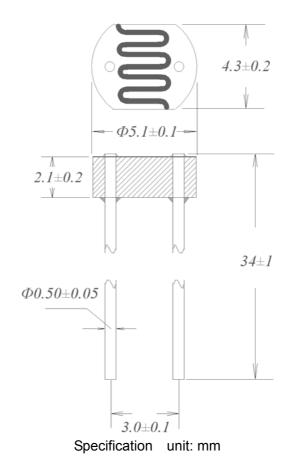
standard light source A(as colour temperature 2856K).

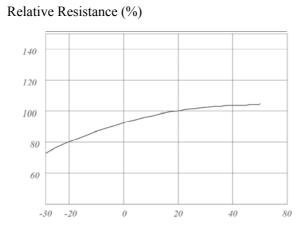
γ value: Logarithm of the ratio of the standard resistance value under 10Lux and that under

100Lux.

$$y = \frac{Lg(R10/R100)}{Lg(100/10)} = Lg(R10/R100)$$

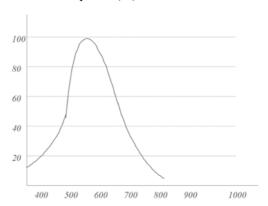
Main Characteristics Curve and Dimensions





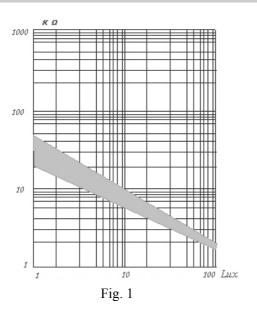
 $\label{eq:total_continuity} \mbox{Temperature ($^{\circ}$C)}$ $\mbox{Temperature-Property}$

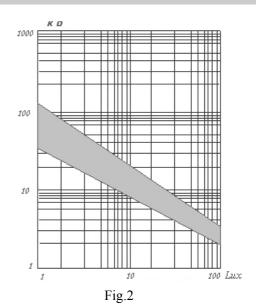
Relative Response (%)

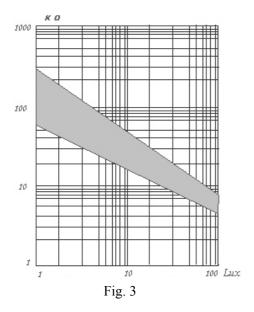


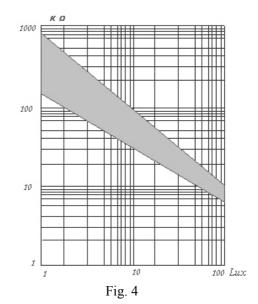
 $Wavelength \ \lambda \ (nm)$ Spectrum Response Characteristic

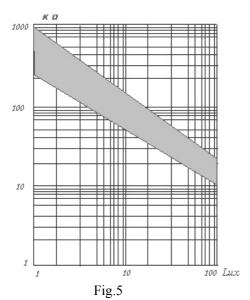
Illuminance-Resistance Characteristics Curve

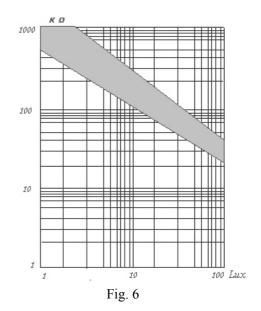












Packing and Precaution

This product is packed with the environmental protection material, 100pcs per small package,1000pcs per big package.

Avoid high temperature and humidity for storing.

Soldering should be completed in the shortest possible time.

It is recommended that the soldering should keep 4mm away from ceramic substrate.