



Specification

Name: Photoresistor

Model: GM55 Series

Dia 5mm Metal Encapsulation LDR Photoresistor Light Sensor
With Dark Resistance 0.2-20 MOhm

General

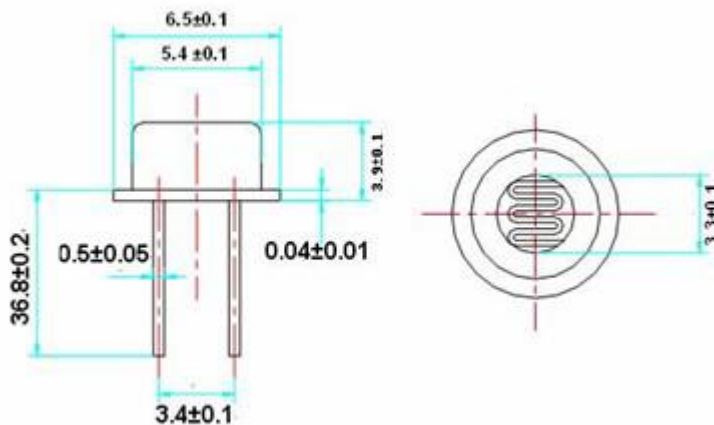
Ao littel Hermetically sealed metal cap photoresistor is a special photoresistor set in an airtight environment with special metal and glass window

The closed environment is filled with nitrogen, which completely isolates the photoresistor from the outside world, thus effectively extend its life cycle

It is broadly applied in high/low temperature, high humidity, acid, alkali and ultraviolet environment

Structure Diagram

Units:mm



Performance and Characteristics

Good reliability, Small volume, High sensitivity, Quick response, Good spectrum characteristic, Epoxy encapsulated, Reliable performance

Application

Camera automatically metering photoelectric control Interior light control
alarm industrial control light-controlled switch light-controlled light electronic toys.

Specification

Item	Type	Max.Voltage (VDC)	Power Dissipation (mw)	Ambient Temperature (°C)	Spectral Response Peak(nm)	Light Resistance (10Lux) KΩ	Dark Resistance MΩ	γ	Response Time (ms)		Illuminance resistance Characteristic
									Increase	Decrease	
φ6.5 Metal	GM5510	100	100	-30~+70	550	5-10	0.2	0.6	30	30	2
	GM5515	100	100	-30~+70	550	10-20	1	0.7	30	30	3
	GM5525	100	100	-30~+70	550	30-50	10	0.75	30	30	4
	GM5558	100	100	-30~+70	550	50-100	20	0.85	30	30	4

Please contact us if special requirements needed.

Test Condition

Max. External Voltage: The max. voltage can be consistently imposed in the components in darkness.

Dark Resistance: The resistance which is get from closed the 10 lux light for 10 seconds.

Max. Power: When the environment temperature is 25°C using the biggest power

Light Resistance: The resistance which is get after 400-600lux light for 2 hours, test with the standard light (CCT: 2854K) 10 lux get the value.

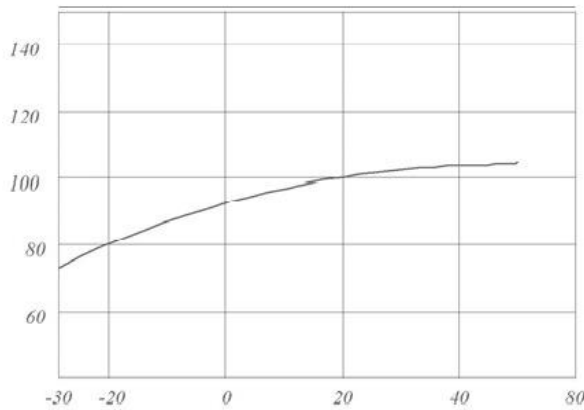
Γ Value: The ratio gets from the standard resistance in 10 lux illuminance and 100lux illuminance's rate.

$$\gamma = \frac{\text{Lg}(R_{10}/R_{100})}{\text{Lg}(100/10)} = \text{Lg}(R_{10}/R_{100})$$

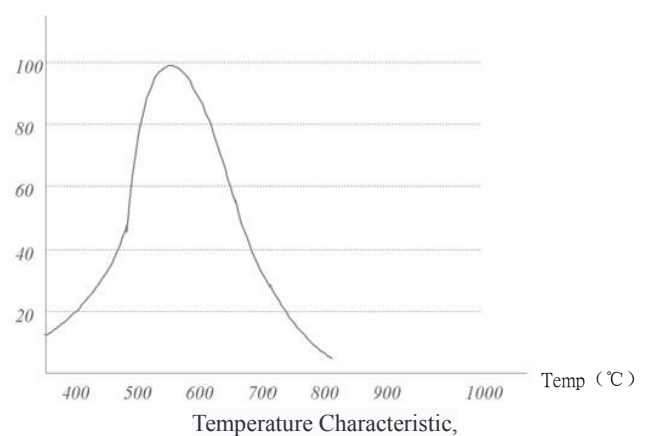
R10、R100 the resistance value in 10lux and 100 lux respectively. (γ's tolerance is ±0.1)

The Main Characteristic Curve

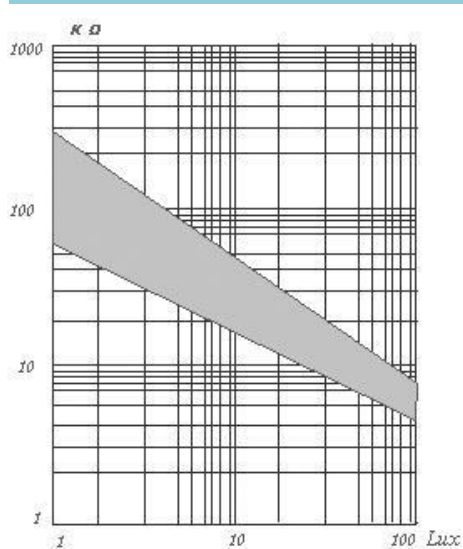
Resistivity Change (%)



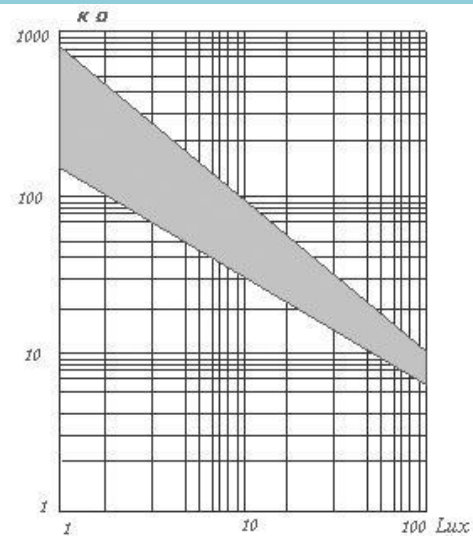
Relative Sensitivity (%)



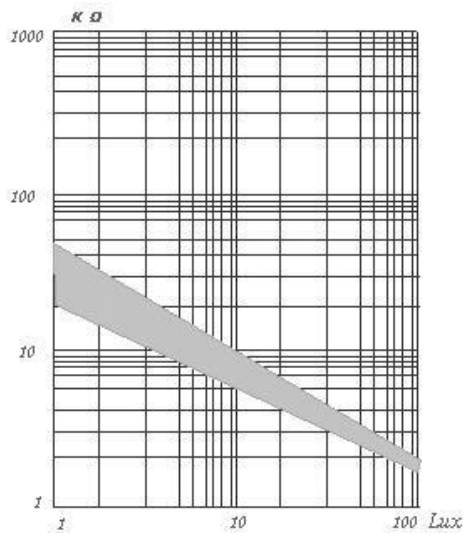
Illuminance- the Resistance Characteristic Curve



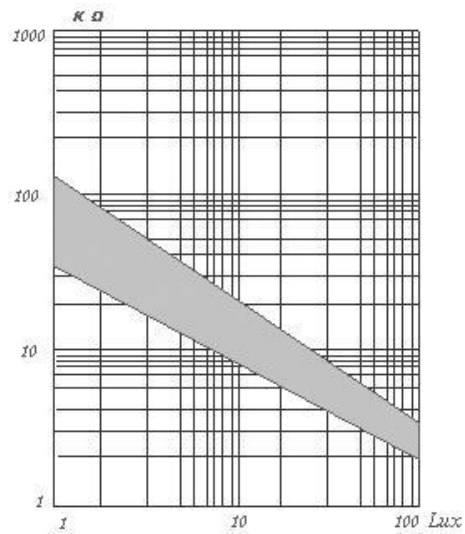
Picture 1



Picture 2



Picture 3



Picture 4

Note

1. Our products use the environmental protection packaging materials, small package is in 200 pieces, big one is 2000 pieces;
2. Avoid storing the product in the damp and high temperature environment;
3. The welding time should as short as possible;
4. The lead bonding position should above the ceramic base 4mm.