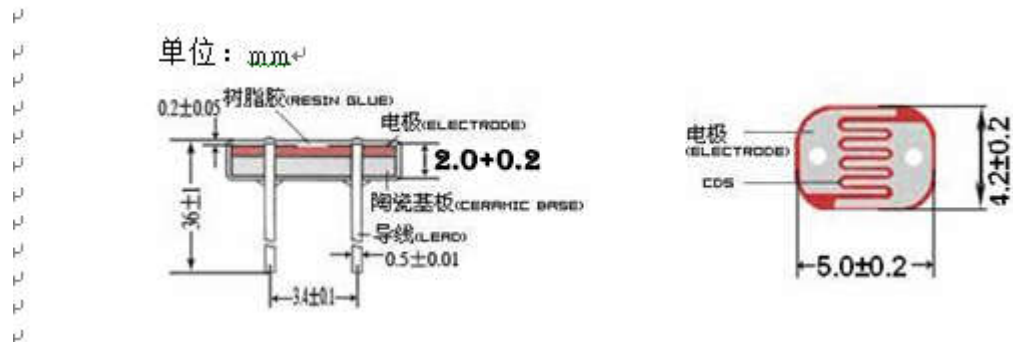




## GM55 Series Datasheet

Photoconductive resistance is a kind of semiconductor resistor, conductivity with light changes. Using the characteristics of different shapes and made by light area of photoconductive resistance. Photoconductive resistance is widely applied in toys, lamps and lanterns, camera, etc.

### Structure diagram(unit:mm)



### Properties and characteristics

**Epoxy encapsulated**  
**Small size**  
**Reliable performance**

**Quick response**  
**High sensitivity**  
**Good characteristic of spectrum**

### Type and specification

Specification	Type	Max Voltage (VDC)	Power Dissipation (mw)	Ambient Temperature Range (°C)	Spectral Response peak(nm)	Light Resistance (10Lux) (KΩ)	Dark Resistance MΩ	$\gamma_{100}^{100}$	Response time (ms)		Illuminance resistance Characterist
									Increase	Decrease	
Φ 5 Series	GM5506	150	90	-30~+50	540	2-5	0.1	0.5	30	30	
	GM5516	150	90	-30~+50	540	5-10	0.2	0.5	30	30	1
	GM5528	150	100	-30~+50	540	10-20	1	0.6	20	30	2
	GM5537-1	150	100	-30~+50	540	20-30	2	0.6	20	30	3
	GM5537-2	150	100	-30~+50	540	30-50	3	0.7	20	30	3
	GM5539	150	100	-30~+50	540	50-100	5	0.8	20	30	4
	GM5549	150	100	-30~+50	540	100-200	10	0.9	20	30	5

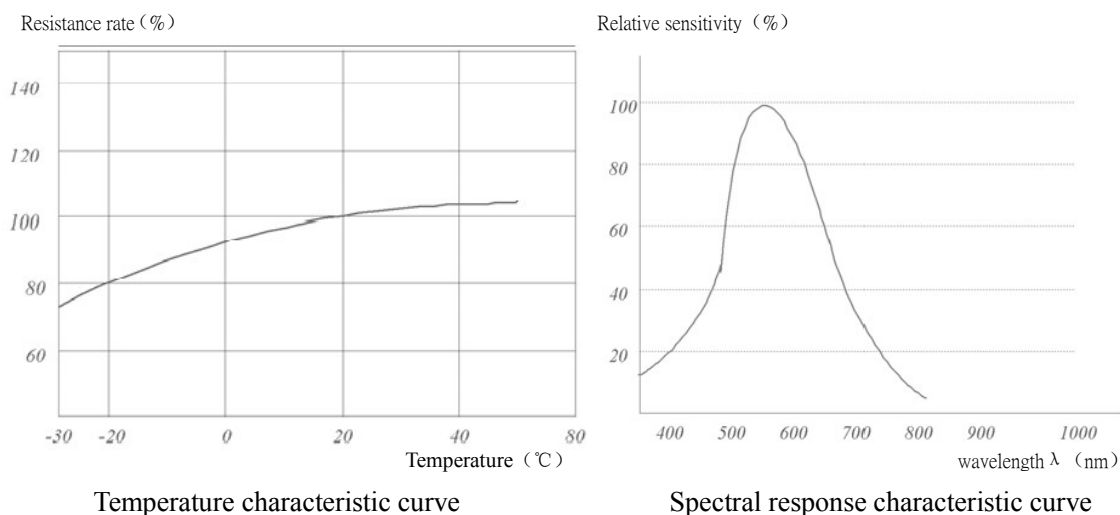


## Measuring Conditions

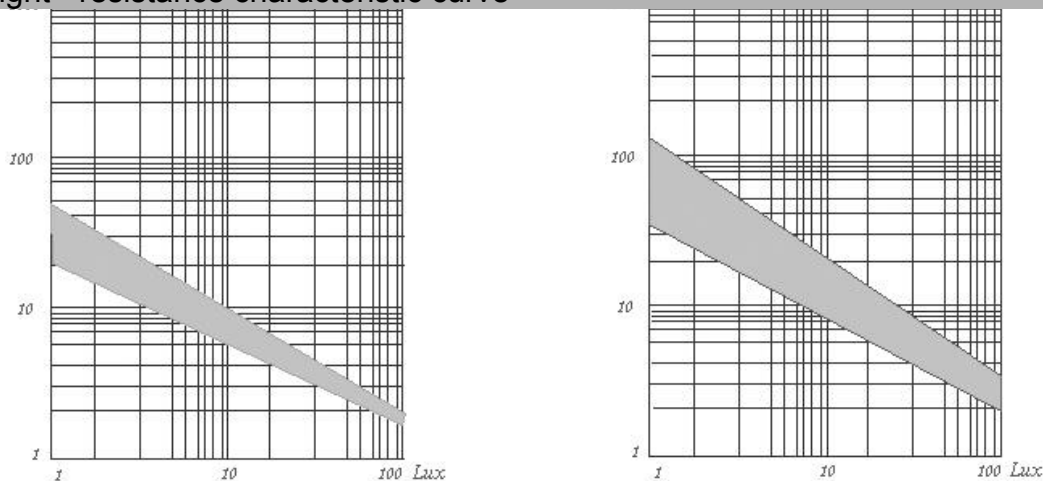
1. Light resistance:  
measured at 10 lux with standard light A (2854k color temperature) and 2h pre-illumination at 400-600 lux prior to testing.
2. Dark Resistance:  
measured 10 seconds after pulsed 10 lux.
3. Gamma Characteristic:  
between 10 lux and 100 lux and given by
$$T = \frac{\log(R_{10}/R_{100})}{\log(100/10)} = \log(R_{10}/R_{100})$$
$$R_{10}, R_{100} \text{ cell resistance at 10 lux and 100 lux.}$$

The error of T is +0.1.
4. Pmax:  
Max. power dissipation at ambient temperature of 25°C.
5. Vmax:  
Max. voltage in darkness that may be applied to the cell continuously.

## Main characteristic curve



## Light - resistance characteristic curve



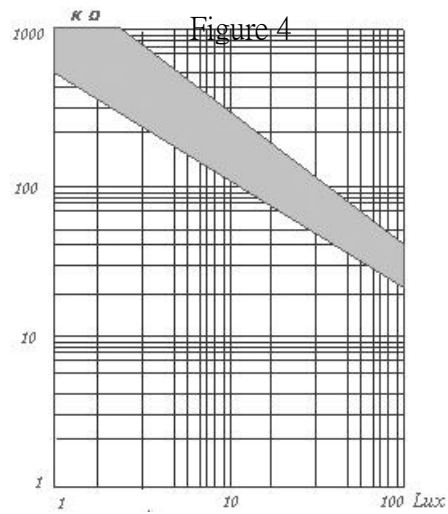
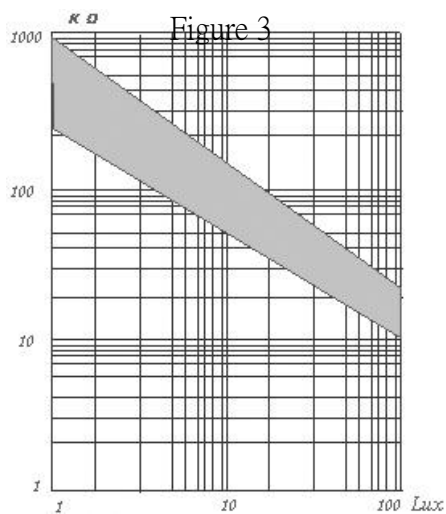
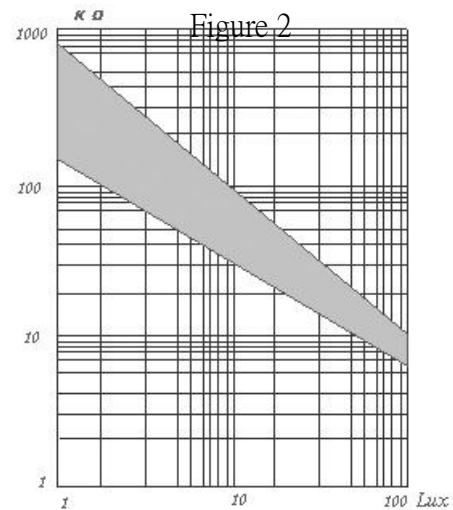
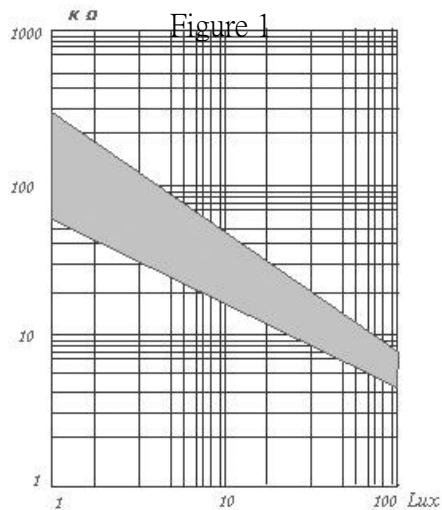


Figure 5

Figure 6

**Note**

This product adopts environmental materials packaging, little packaging is 200pcs, big packaging is 2000pcs.  
To avoid this product in damp, high temperature environment preservation.  
Welding possible time.  
Attention should be apart from ceramic welding wire 4mm base location.