

# Specification Paper

Customer: GJ-000

Description : cds light dependant resistor

Type : MJ4548

|       |               |          |                 |
|-------|---------------|----------|-----------------|
| Draft | Wang jianhong | Approval | Zhang Shengxiao |
| Check | Wang Bingkang | Date     | 2008-12-3       |

## Customer's Approval

We are willing to check and accept on basis of the specification paper.

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## The Main Technical Parameter of Cds Light Dependant Resistor

### I Outline of Product

Application: Control automatically the working state of industrial products depending on the variety of light outside basing on the theory of photo-electricity control.

### II Electrical Property

The maximum power loss: the maximum power at ambient temperature 25°C.

The maximum external voltage: which can apply successively to components in darkness.

### III Testing Method

#### 1. Light resistance

Illuminated by 400-600LUX light for two hours, then it should be tested with 10LUX light under standard light source A. (as color temperature 2856K)

| Type   | Light Resistance<br>10LUX(KΩ)<br>2856K | Minimum Dark Resistance<br>e<br>(MΩ) | Minimum Value Y<br>Gamma | Maximum Voltage<br>(VDC) | Maximum Power Loss<br>25°C(Mw) | Spectral Peak Value<br>(nm) | Temp (°C) |         |
|--------|--|--------------------------------------|--------------------------|--------------------------|--------------------------------|-----------------------------|-----------|---------|
|        |  |                                      |                          |                          |                                |                             | Working   | Storage |
| MJ4548 | 50-100                                 | 20                                   | 0.8                      | 100                      | 90                             | 540                         | -20~+60   | -30~+70 |

#### 2. Dark Resistance

Refer to the resistance ten seconds after the 10Lux light being out.

3. Value Y is the standard value under 10Lux and 100Lux.

R10 and R100 are resistance under 10Lux and 100Lux respectively. (limits:  $\pm 0.1$ )

4. Flexibility of lead wire: There should not be any break or harm of lead wire when it is bended at will.
5. Oscillation: There should be no harm to light dependant resistor when it is placed on oscillator for 2 hours.
6. Withstand voltage: There should be no abnormal when 150 V of voltage applied to the light dependant resistor in darkness.
7. Moisture proof & thermostability: The rate of variation of resistance should be  $\pm 10\%$  when being in the working condition of humidity 75% and temperature 70°C or in storage condition of humidity 75% and temperature 80°C.
8. Temperature surge test: The rate of variation of the resistance of light dependant resistor between before and after it is dealt with by the following step should be  $\pm 10\%$ : At first be placed in condition of 80°C for 4 hours, then be placed in condition of 25°C for 2 hours and finally be placed in condition of -30°C for 4 hours.

## **MJ Cds Light Dependant Resistor**

