

## PRODUCT DATASHEET

### DESCRIPTION

品名: 金属信号灯metal indicator light

### SPECIFICATION

规格: 8mm

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### DATE

编制日期: 2019-11-28

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### PART NO.

本厂型号: KZ1M-8SW-D-1

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### REFERENCE No.

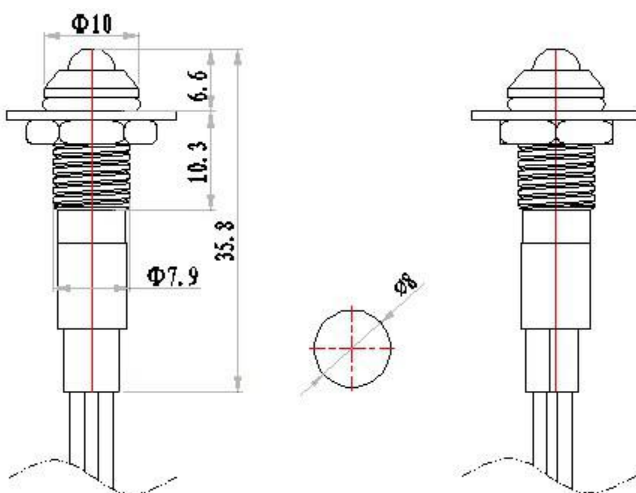
档案编号:

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1. 图片 Picture:



2. 图纸 drawing:



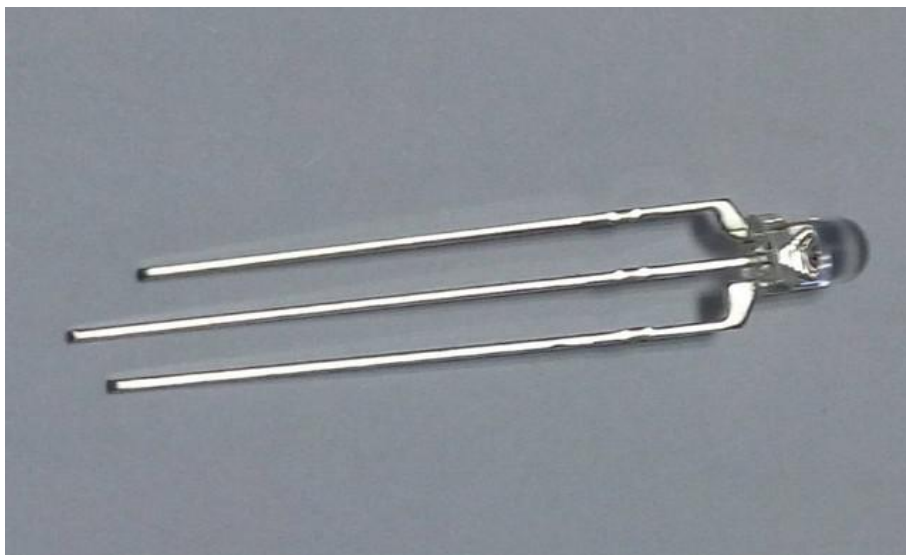
### 3 配件材料 component material

### 4 性能参数 performance parameter

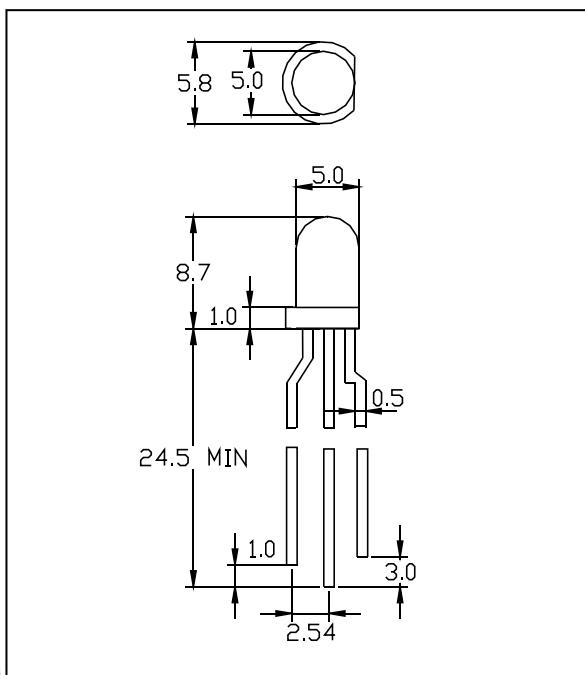
| 配件名Component name  | 材料material  |
|--------------------|---|
| 灯罩<br>lens         | PC 塑料<br>PC plastic                                   |
| 金属壳<br>Metal body  | H59 黄铜 or 204 不锈钢<br>H59 brass or 204 stainless steel |
| 加固垫片<br>washer     | T10 冷轧钢<br>T10 Cold Rolled Steel                      |
| 防水圈<br>rubber ring | SIL 硅胶<br>SIL silica gel                              |
| 螺帽<br>nut          | H59黄铜<br>H59 nickel plated brass                      |
| 灯座<br>housing      | PA66阻燃尼龙<br>PA66 nylon                                |
| 光源<br>Light source | LED<br>LED灯   |
| 电阻<br>Resistor     | 金属膜电阻<br>Metal film                                   |
| 导线<br>Cable        | Pvc AWG24 0.2mm <sup>2</sup>                          |
| 插件<br>plug-in      |   |

| 项目items                                   | 参数parameter      |
|---|------------------|
| 额定电压<br>Rated voltage                     | 3V-780V DC or AC |
| 额定电流<br>rated current                     | 20mA             |
| 额定功率<br>rated power                       | 0.2W             |
| 绝缘耐压<br>Insulation and voltage resistance | 1800V            |
| 工作寿命<br>working life                      | 50000h           |
| 电气寿命<br>electrical life                   | 50000次           |
| 耐寒<br>cold-resistant                      | -40℃             |
| 耐热<br>heat-resisting                      | 80℃              |

#### 4. Detailed Picture :



#### 5.LED Specification:



■ Emitter 外型图

## ■ Absolute Maximum Rating 极限工作参数

| Parameter   | 参数名称 |                     | Unit (单位) | Parameter<br>参数名称  |
|---|------|---------------------|-----------|--|
| Reverse Voltage   | 反向电压 | 5                   | V         | Reverse Voltage<br>反向电压  |
| Power Dissipation   | 功耗   | 100                 | mW        | Power Dissipation<br>功耗  |
| Operating Temperature Ranger<br>正常使用温度                        |      | -40 ~ +65           | °C        | Operating Temperature<br>Ranger<br>正常使用温度                            |
| Storage Temperature Ranger<br>存储温度                            |      | -40 ~ + 80          | °C        | Storage Temperature<br>Ranger<br>存储温度                                |
| Lead Soldering Temperature [3mmFrom Body]<br>焊接温度 (离胶体3mm处焊接) |      | 260°C For 5 Seconds |           | Lead Soldering Temperature<br>[3mmFrom Body]<br>焊接温度 (离胶体3mm处<br>焊接) |
| Peak IF(mA) (1/10Duty Cycle 0.1ms Pulse<br>Width) 瞬间脉冲电流      |      | 60                  | mA        | Peak IF(mA) (1/10Duty<br>Cycle 0.1ms Pulse<br>Width) 瞬间脉冲电流          |

\*Ifp Conditions: Pulse Wide $\leq$ 10msec $\leq$ 1/10 瞬间脉冲电流

\*Tsol Conditions:3mm from the base of epoxy bulb 最高焊接温度 距胶体3mm

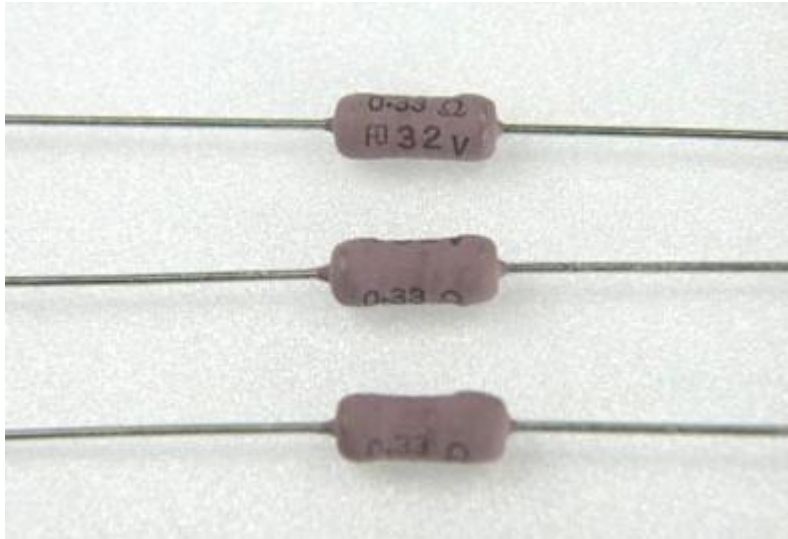
## ■ Typical Optical/Electrical Characteristics 光电特性参数

| Parameter<br>参数名称                | Symbol<br>符号     |         | Min<br>最小值 | Type<br>典型值 | Max<br>最大值 | Unit<br>单位 | Test<br>Condition<br>测试条件 |
|----------------------------------|------------------|---------|------------|-------------|------------|------------|---------------------------|
| Luminous Intensity<br>发光亮度       | IV               | 红Red    | 90         | 100         | 120        | mcd        | IF=20mA                   |
|                                  |                  | 绿Yellow | 50         | 60          | 70         |            |                           |
| Peak Wavelength<br>峰值波长          | $\lambda_p$      | 红Red    | ---        | 622         | ---        | nm         | IF=20mA                   |
|                                  |                  | 绿Yellow | ---        | 566         | ---        |            |                           |
| Dominant Wavelength<br>主波长       | $\lambda_d$      | 红Red    | 625        | 627         | 630        | nm         | IF=20mA                   |
|                                  |                  | 绿Yellow | 569        | 571         | 573        |            |                           |
| Spectrum Line Half-Width<br>频谱半宽 | $\Delta \lambda$ | 红Red    | ---        | 30          | ---        | nm         | IF=20mA                   |
|                                  |                  | 绿Yellow | ---        | 30          | ---        |            |                           |
| Forward Voltage<br>正向电压          | VF               | 红Red    | 1.8        | 2.1         | 2.2        | v          | IF=20mA                   |
|                                  |                  | 绿Yellow | 1.8        | 2.1         | 2.3        |            |                           |
| Reverse Current<br>反向漏电流         | IR               | 红Red    |            |             | 10         | uA         | UR=5V                     |
|                                  |                  | 绿Yellow |            |             |            |            |                           |
| Lens Color<br>胶体颜色               | 白色扩散             |         |            |             |            |            |                           |

### Notes:

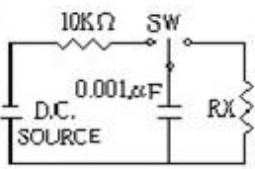
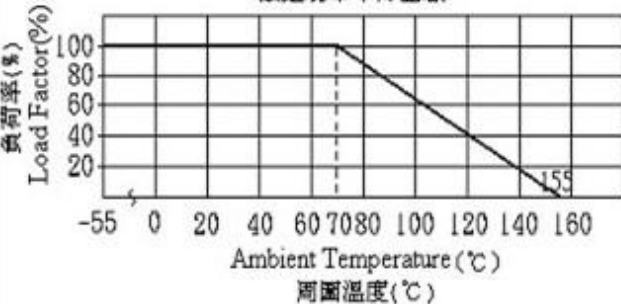
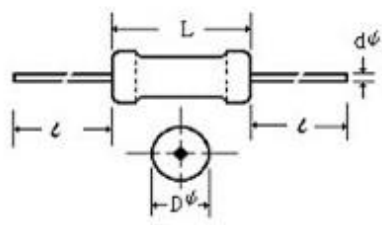
1. Work absolute ratings Ta=25°C humidity=60% 工作常规值 温度=25°C 湿度=60%
2. Tolerance of measurement of forward voltage±0.1V 正向电压误差范围±0.1V
3. Test Machine: SSP6612 series LED test system

## 6. Resistor Specification ( RMS 1/4W 200kΩ):



### CHARACTERISTICS 性能

| ITEM 项目                                    | SPEC 规格  | REMARKS 备注  |
|--|--|---|
| Load life under high temperature<br>高温负荷寿命 | ±1.5%  | JIS C 5201-1 (4.25.1) Rated voltage at 70°C for 1,000 hours<br>额定电压70°C 1,000小时                               |
| Load life under high humidity<br>耐湿负荷寿命    | ±5%  | JIS C 5201-1 (4.24) Rated voltage at 40°C, 95% RH for 1,000 hours<br>额定电压40°C, 95% RH 1,000小时                 |
| Temp. coeff of resistance<br>温度系数          | < 1K= ±500 PPM/°C<br>≤ 100KΩ=±300 ppm/°C<br>>100KΩ=±200 ppm/°C | JIS C 5201-1 Room temp. + 100°C, 30min<br>室温 + 100°C, 30分钟  |
| Short time overload<br>短时间过负荷              | ±1%  | JIS C 5201-1 (4.13) 6.25 times the rated power for 5 seconds<br>6.25倍额定功率 5秒                                  |
| Temperature cycling<br>温度循环                | ±1%  | JIS C 5201-1 (4.19) 5 cycles for -25°C±3°C(30min); room temp.(30min)<br>~ +85°C±3°C(30min) room temp. (30min) |
| Resistance to soldering heat<br>焊锡耐热       | ±1%  | JIS C 5201-1 (4.18) 260°C±5°C for 10 seconds(焊锡槽)<br>350°C±10°C for 3.5 seconds(手焊锡)                          |
| Insulation resistance<br>绝缘电阻              | >1,000MΩ   | JIS C 5201-1 (4.6.1.1) 500 volt Insulation test 1min<br>500 V绝缘测试电压1分钟  |

|   |  |  |
|---|--|--|
| Pulse withstanding voltage<br>脉冲  | $\pm 20\%$   | <p>           ■The following discharge cycle is repeated in the circuit of the left fig. 2.5 sec. ON 2.5 sec. OFF 50 cycles. With following DC pulse test voltage<br/>           ■ Pulse voltage:1/6W,S1/4W: 3KV.<br/> <math>\geq 1/4W</math>: 100K<math>\Omega</math>: (3KV);<br/>           100K<math>\Omega</math>-620K<math>\Omega</math>: (5KV); &gt; 620K<math>\Omega</math>: (10KV)         </p>  |
| <p style="text-align: center;">DERATING CURVE<br/>         額定功率下降曲線</p>  |  <p>           Various type of forming &amp; taping are available<br/>           提供插装的造型与带装<br/>           Coating color: RMU1/4W, RMU1/6W、dark blue, other、pink。<br/>           涂装颜色: RMU1/4W, RMU1/6W 蓝色, 其他粉红色。         </p> |  |

## ■ CHARACTERISTICS 性能

| Model<br>型号             | Power<br>Rating<br>额定功率<br>(W) | Resistance<br>Range E-24<br>阻值范围<br>$\Omega$ | Maximum<br>Working<br>Voltage<br>最高使用<br>电压 | Dielectric<br>Withstandi<br>ng<br>Voltage<br>耐电压 | Dimension 尺寸 (mm) |               |            |                |
|-------------------------|--------------------------------|--|---|--|-------------------|---------------|------------|----------------|
|                         |                                |  |   |  | L                 | D $\phi$      | t          | d $\phi$       |
| RMU1/4W<br>、<br>RMS1/2W | 1/4, 1/2                       | 10 $\Omega$ ~ <100M                          | 1600V                                       | 700V   | 6 $\pm$ 0.3       | 2.4 $\pm$ 0.1 | 28 $\pm$ 2 | 0.6 $\pm$ 0.05 |