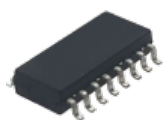


## ■ Product Images



SOP16

## ■ Features

- Contact Form: 4a
- Load Voltage: 100V
- Load Current: 100mA
- Low Off-State Leakage Current: 1 $\mu$ A

## ■ Application

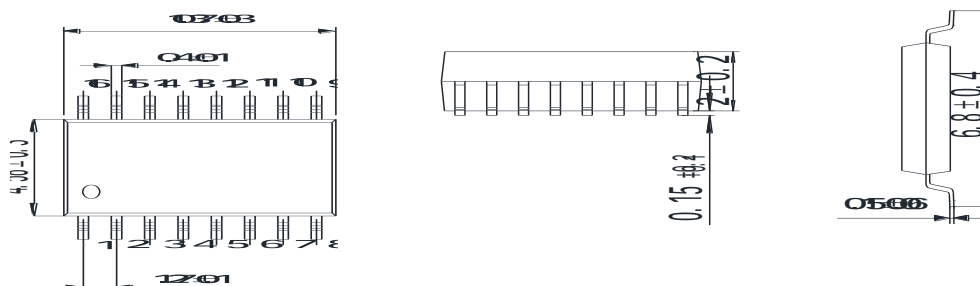
- Automatic Test Equipment
- Telephone Equipment
- Sensing Equipment
- Security Equipment
- I/O Modules
- Modem

## ■ Types

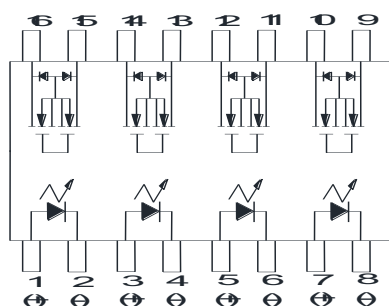
| Output Rating |              | Marking model | Part Number |
|---------------|--------------|---------------|-------------|
| Load voltage  | Load current |               | SMD         |
| 100V          | 100mA        | MJS225S       | MJS225S     |

Note: The "A" indicating the pin type is not marked on the product. Please refer to the ordering example model number when placing an order.

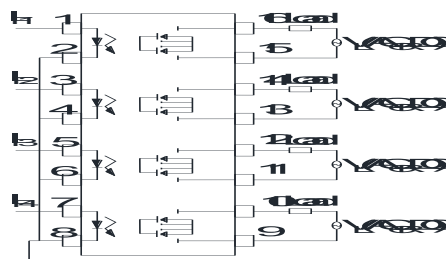
## ■ Dimensions



## ■ Terminal Identification



## ■ Wiring Diagram



[ Technical parameters ( Ambient Temperature 25°C ) ]

## ■ I/O Absolute Maximum Ratings

| Item                                            |                                        | Symbol 符号         | BCS225S              |
|-------------------------------------------------|----------------------------------------|-------------------|----------------------|
| Operating Temperature                           |                                        | T <sub>OPR</sub>  | -40°C ~ +85°C        |
| Storage Temperature                             |                                        | T <sub>STG</sub>  | -40°C ~ 100°C        |
| Input                                           | Continuous LED Current                 | I <sub>F</sub>    | 50mA                 |
|                                                 | Peak LED Current LED (f=100Hz,Duty=1%) | I <sub>FP</sub>   | 1000mA               |
|                                                 | LED Reverse Voltage                    | V <sub>R</sub>    | 5V                   |
|                                                 | Input Power Dissipation                | P <sub>IN</sub>   | 300mW                |
| Output                                          | Load Voltage                           | V <sub>L</sub>    | 100V (AC peak or DC) |
|                                                 | Load Current                           | I <sub>L</sub>    | 100mA                |
|                                                 | Peak Load Current ( 1ms,1 shot )       | I <sub>PEAK</sub> | 200mA                |
|                                                 | Output Power Dissipation               | P <sub>OUT</sub>  | 600mW                |
| Total Allowable Power Dissipation               |                                        | P <sub>T</sub>    | 650mW                |
| I/O Breakdown Voltage ( RH=60%,1min )           |                                        | V <sub>I/O</sub>  | 1500Vrms             |
| I/O Breakdown Voltage ( RH=60%,1min ) (Add 注 H) |                                        | V <sub>I/O</sub>  | 3750Vrms             |

## ■ Electrical Specifications

| Item           |                           |      | Symbol             | BCS225S | Conditions                                                    |
|----------------|---------------------------|------|--------------------|---------|---------------------------------------------------------------|
| Input          | LED Forward Voltage       | TYP. | V <sub>F</sub>     | 1.3V    | I <sub>F</sub> =10mA                                          |
|                |                           | MAX. |                    | 1.5V    |                                                               |
|                | Operation LED Current     | TYP. | I <sub>F ON</sub>  | 0.5mA   |                                                               |
|                |                           | MAX. |                    | 3mA     |                                                               |
|                | Recovery LED Voltage      | MIN. | V <sub>F OFF</sub> | 0.7V    |                                                               |
| Output         | On-Resistance             | TYP. | R <sub>ON</sub>    | 0.3Ω    | I <sub>F</sub> =5mA,I <sub>L</sub> = Rating,<br>within 1 sec. |
|                |                           | MAX. |                    | 3Ω      |                                                               |
|                | Off-State Leakage Current | MAX. | I <sub>LEAK</sub>  | 1μA     | I <sub>F</sub> =0mA,V <sub>L</sub> =Rating                    |
| Time parameter | Turn-On Time              | TYP. | T <sub>ON</sub>    | 0.15ms  | I <sub>F</sub> =5mA<br>I <sub>L</sub> =100mA                  |
|                |                           | MAX. |                    | 2.0ms   |                                                               |
|                | Turn-Off Time             | TYP. | T <sub>OFF</sub>   | 0.03ms  |                                                               |
|                |                           | MAX. |                    | 0.3ms   |                                                               |
|                | I/O Insulation Resistance | MIN. | R <sub>I/O</sub>   | 1000MΩ  | DC500V                                                        |
| I/O            | I/O Capacitance           | TYP. | C <sub>I/O</sub>   | 1.7pF   | f=1MHz                                                        |