



## DESCRIPTION:

The products are transistor opto-couplers in a SSOP4 package. The device is a photoelectric coupler composed of light-emitting diode and phototransistor. The products are widely used in switching power supply, intelligent meter, industrial control, measuring instruments, office equipment such as copiers, household appliances: such as air conditioners, fans, water heaters, etc.

## MAIN FEATURES

High isolation 3750 VRMS

Operating temperature range -40°C to 110°C

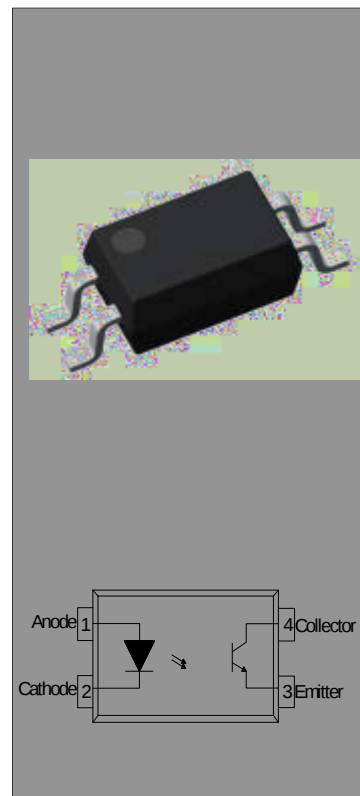
RoHS & REACH Compliance

HBM: H3A; MM: M4; CDM:C3

CQC approved

VDE approved

UL approved



## ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

| Input                   | Forward Current           | $I_F$     | 50                | mA   |
|-------------------------|---------------------------|-----------|-------------------|------|
|                         | Peak Forward Current      | $I_{FP}$  | 1 <sup>7</sup>    | A    |
|                         | Reverse Voltage           | $V_R$     | 6                 | V    |
|                         | Power Dissipation         | $P_D$     | 75                | mW   |
| Output                  | Collector-emitter Voltage | $V_{CEO}$ | 80                | V    |
|                         | Emitter-collector Voltage | $V_{ECO}$ | 7                 | V    |
|                         | Collector Current         | $I_C$     | 50                | mA   |
|                         | Power Dissipation         | $P_C$     | 150               | mW   |
| Total Power Dissipation |                           | $P_{tot}$ | 225               | mW   |
| Isolation Voltage       |                           | $V_{iso}$ | 3750 <sup>8</sup> | Vrms |
| Operating Temperature   |                           | $T_{opr}$ | -40~+110          |      |
| Junction Temperature    |                           | $T_j$     | 125               |      |



|                       |                  |          |  |
|-----------------------|------------------|----------|--|
| Storage Temperature   | T <sub>stg</sub> | -55~+125 |  |
| Soldering Temperature | T <sub>sol</sub> | 260      |  |

**NOTE1** °•Â,\% # "Edg,,,H\$b"!%o &ø!qì '1Ç '1Ç p



ORDERING INFORMATION

|                                   |              |            |                     |                           |       |                 |
|-----------------------------------|--------------|------------|---------------------|---------------------------|-------|-----------------|
| J                                 | OC           | T          | 217                 | C                         | -S4   | /               |
| JieJie Microelectronics Co., Ltd. | Opto Coupler | Transistor | Marketization Model | CTR Rank:A/B/C/D/E/Q/None | SSOP4 | None:T1<br>R:T2 |

| Packing Quantity |                       |
|------------------|-----------------------|
| Option           | Quantity              |
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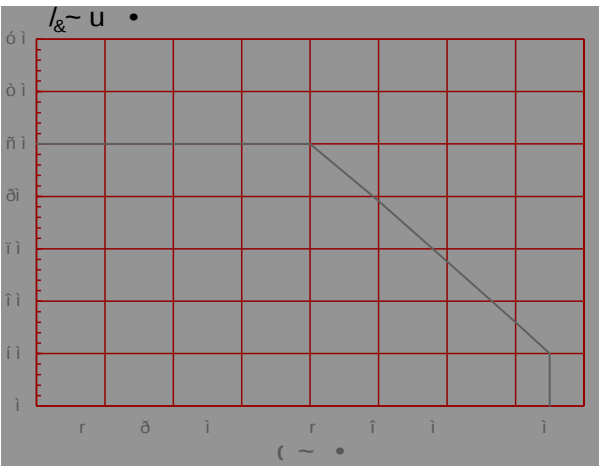
MARKING

|  |                              |
|--|------------------------------|
|  | <p>YWWZZX</p> <p>LOT NO.</p> |
|--|------------------------------|

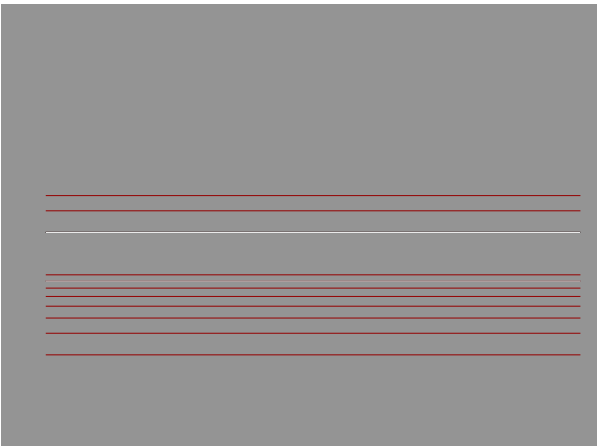


# Characteristics Curves

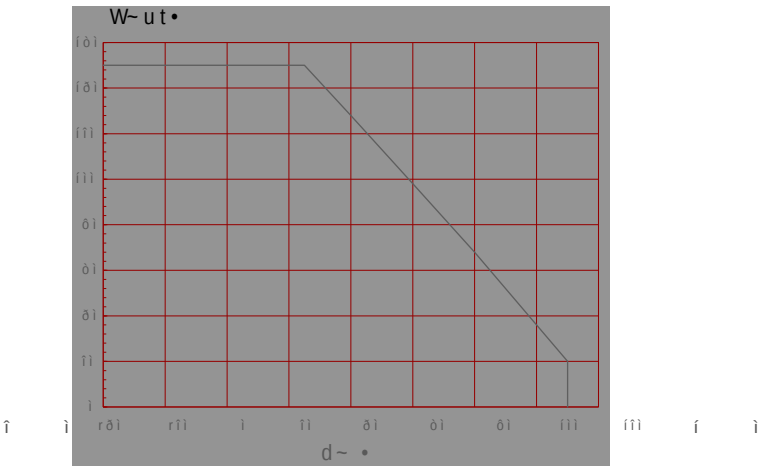
Max. Allowable LED Forward Current vs. Ambient Temperature



Forward Current vs. Forward Voltage



Collector Power Dissipation vs. Ambient Temperature

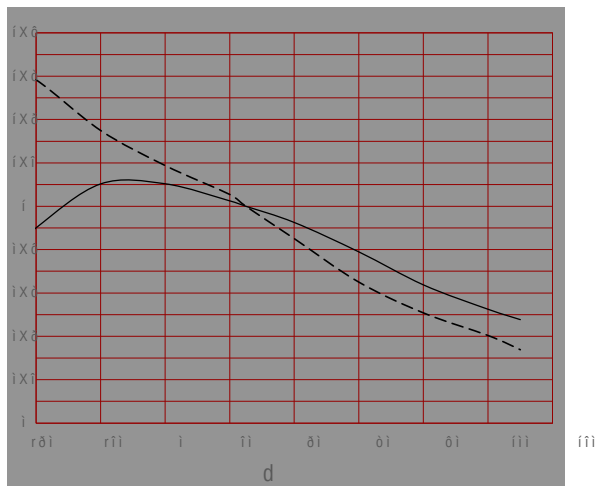


Normalized Collector Dark Current vs. Ambient Temperature





Normalized Current Transfer Ratio vs.  
Ambient Temperature

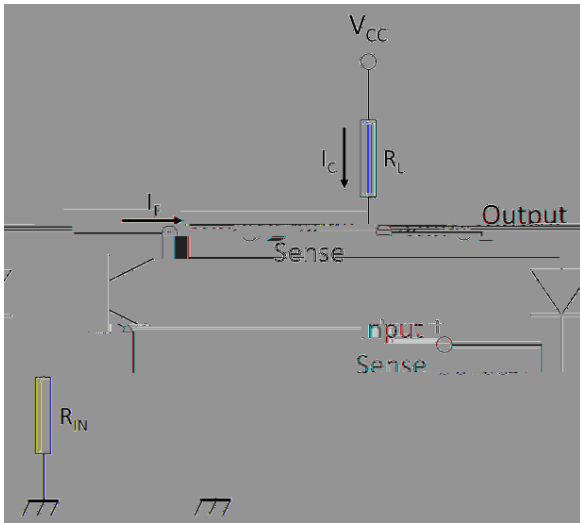


Normalized Collector-emitter Saturation  
Voltage vs. Ambient Temperature

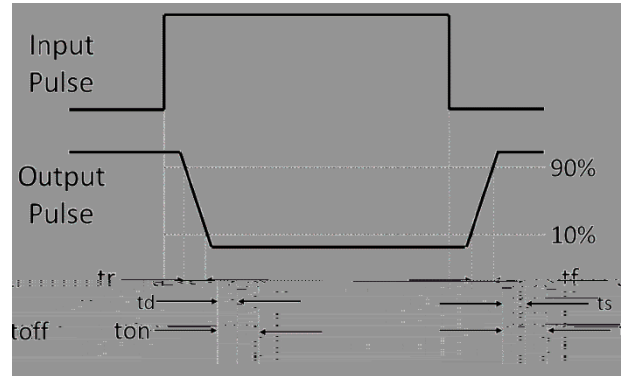


## Test Circuits

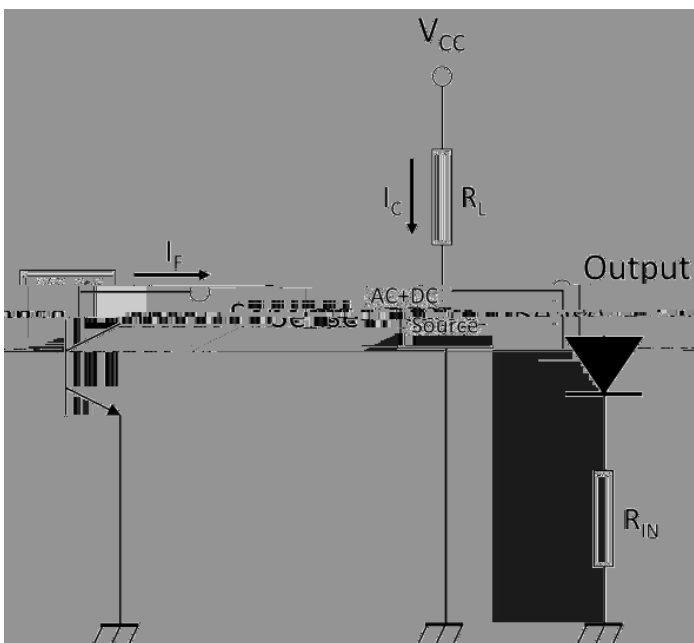
### Test Circuits of Response Time



### Curves of Response Time

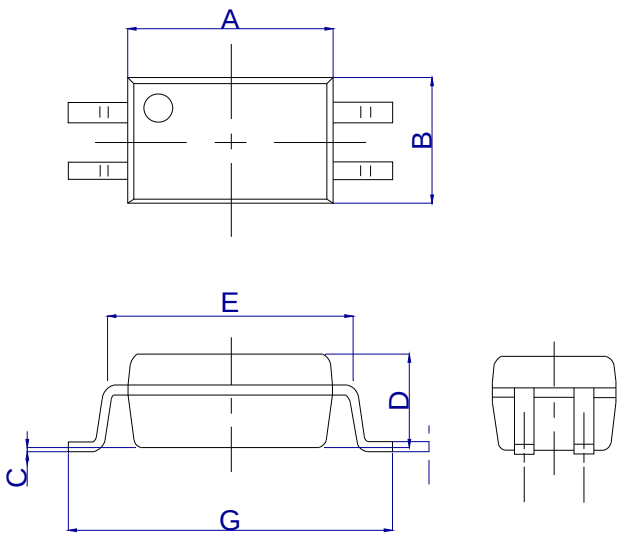


### Test Circuits of Frequency Response





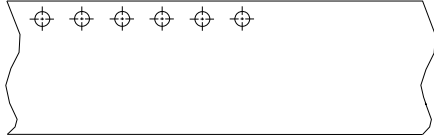
Package Dimension (Unit: mm)





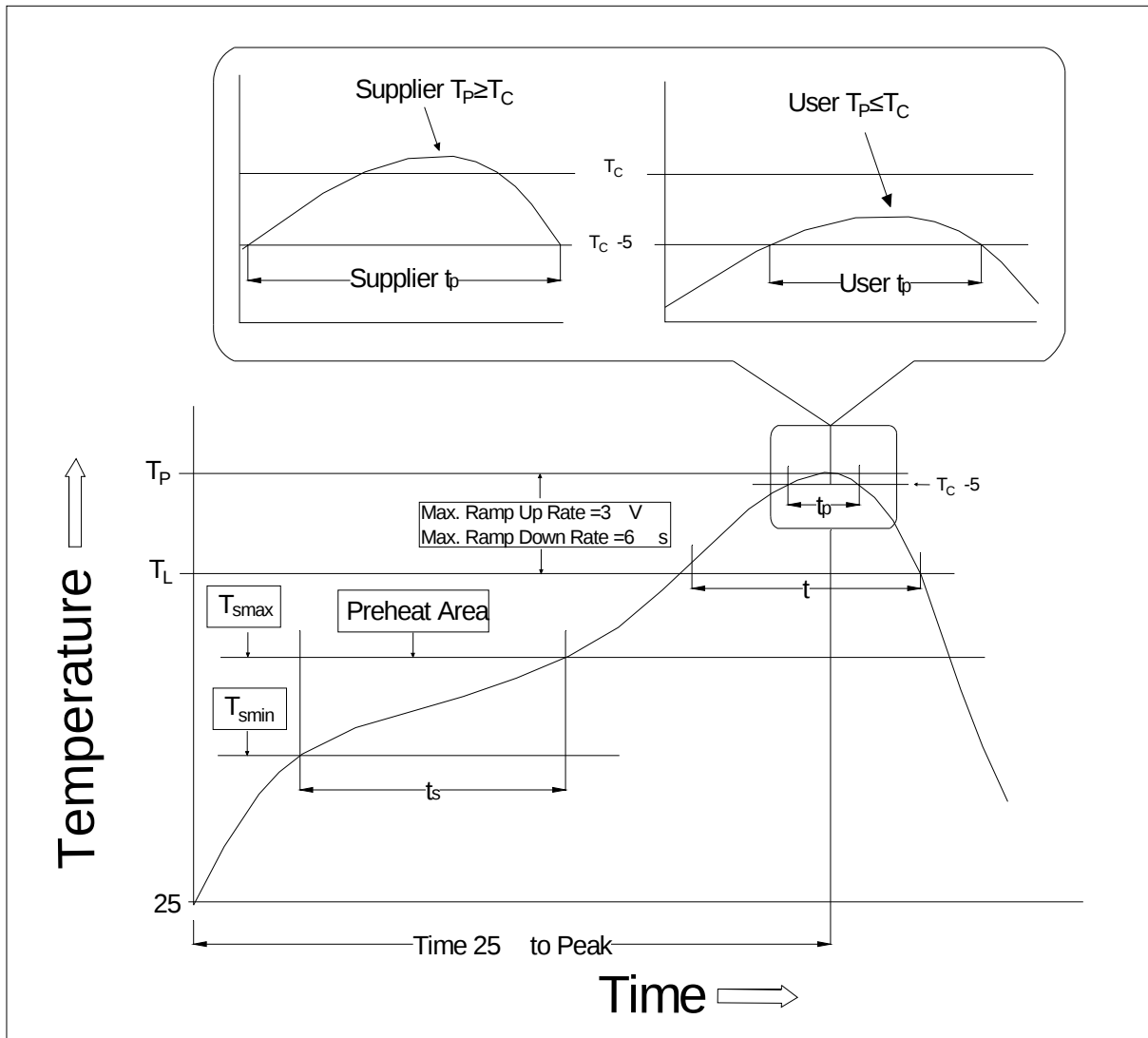
## CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option None/R





## REFLOW INFORMATION



|                                                                       |                  |                  |
|-----------------------------------------------------------------------|------------------|------------------|
|                                                                       |                  |                  |
| Temperature Min. (T <sub>smin</sub> )                                 | 100              | 150              |
| Temperature Max. (T <sub>smax</sub> )                                 | 150              | 200              |
| Time (t <sub>s</sub> ) from (T <sub>smin</sub> to T <sub>smax</sub> ) | 60-120 seconds   | 60-120 seconds   |
| Ramp-up Rate (t <sub>L</sub> to t <sub>P</sub> )                      | 3 °C/second max. | 3 °C/second max. |
| Liquidus Temperature (T <sub>L</sub> )                                | 183              | 217              |
| Time (t <sub>L</sub> ) Maintained Above (T <sub>L</sub> )             | 60-150 seconds   | 60-150 seconds   |
| Peak Body Package Temperature                                         | 235 +0 /-5       | 260 +0 /-5       |
| Time (t <sub>P</sub> ) within 5 °C of 260                             | 20 seconds       | 30 seconds       |
| Ramp-down Rate (T <sub>P</sub> to T <sub>L</sub> )                    | 6 °C/second max. | 6 °C/second max. |
| Time 25 °C to Peak Temperature                                        | 6 minutes max.   | 8 minutes max.   |



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Note:

1. Reflow soldering is recommended at the temperatures and times shown, no more than three times.
2. Avoid direct contact be