

## Dongguan Zhiding Electronics Technology Co., LTD

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#### **Product Details:**

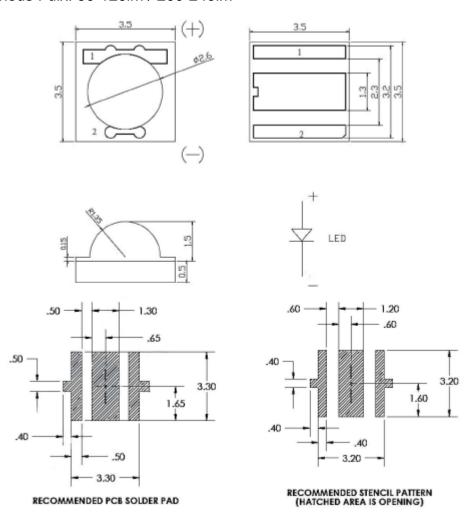
Product name: 1W & 3W 3535 White Chip LED

Emitting Color: White Size: 3.5x3.5x2.0mm

Forward Current: 350mA / 700mA

Forward Voltage: 2.8-3.6V

Luminous Fulx: 90-120lm / 200-240lm



## Features:

Small package with high efficiency

Long operating life

Available in white, green, blue, red, yellow, Amber

Typical color temperature: 5500-6500 K

View angle: 120°

Low voltage DC operated.

The product itself will remain within RoHS compliant Version.

ESD protection.

## **Applications:**

Reading lights (car, bus, aircraft)

Portable (flashlight, bicycle)

Mini\_accent/Uplighters/Downlighters/Orientation

Bollards/Security/Garden

Cove/Undershelf/Task

Automotive rear combination lamps

Traffic signaling/Beacons/ Rail crossing and Wayside

Indoor/Outdoor Commercial and Residential Architectural

Edge\_lit signs (Exit, point of sale)

LCD Backlights/Light Guides



## **Precautions for Use:**

- Over-current-proof
- Customer must apply resistors for protection, otherwise slight voltage shift may cause enormous current change and burn out failure would happen.
- Storage
- Do not open moisture proof bag before the products are ready to use.
- The Infrared LED should be used within a year.
- After opening the package, the Infrareds should be kept at  $30^{\circ}$ C or less and 70%RH or less.

- The Infrared LED should be used within 168 hours (7 days) after opening the package.
- If the moisture absorbent material (silicone gel) has faded away or the Infrareds have exceeded the storage time, baking treatment should be performed using the following conditions.
- Pre-curing treatment: 60±5℃ for 24 hours.
- Thermal Management
- Because the Infrared LED is a high power dissipation device, special and sufficient consideration in thermal management design must be made to optimize the thermal performance.
- Heat sink design is implemented in the device for an additional thermal connection. Since the device is capable of SMT process, tin must be spread both heat sink and solder pads areas to dissipate the heat.
- A high thermal conductivity substrate, such as Aluminum or Copper plate etc, must be applied for external thermal management. It is strongly recommended that the outer heat sink or PCB dimension per Infrared LED can not be less than 25 x 25 x 1 (L x W x H) mm. The materials for outer heat sink can be FR4 on Aluminum, MCPCB, or FPC on Aluminum.
- Special thermal designs are also recommended to take in outer heat sink design, such as FR4 PCB on Aluminum with thermal vias or FPC on Aluminum with thermal conductive adhesive, etc.
- Sufficient thermal management must be conducted, or the die junction temperature will be over the limit under large electronic driving and Infrared LED lifetime will decrease critically.
- Soldering Condition
- Reflow soldering should not be done more than two times.
- While soldering, do not put stress on the Infrareds during heating.
- After soldering, do not warp the circuit board.
- Soldering Iron
- For prototype builds or small series production runs it is possible to place and solder the LED by hand.
- Dispensing thermal conductive glue or grease on the substrates and follow its curing spec. Press Infrared housing to closely connect Infrared and substrate.
- It is recommended to hand solder the leads with a solder tip temperature of 280°C for less than 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal.
- Be careful because the damage of the product is often started at the time of the hand solder.
- Handling Indications
- During processing, mechanical stress on the surface should be minimized as much as possible.

Sharp objects of all types should not be used to pierce the sealing compound.

Welcome to receive your inquiry about 1W & 3W 3535 White Chip LED, we are LED manufacturers, will provide high quality products, great service to you.

# WELCOME TO CONTACT US>>>>WWW.ZHIDINGLED.COM



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