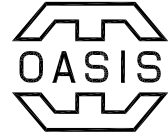


# TAIWAN OASIS LED DATA SHEET



Part No.TOL-50aHGaDEa

- ◆ Pb Free Products.
- ◆ Green Emitting LED.
- ◆ High Efficiency LED,  $\phi 5\text{mm}$ , Green Diffused Package.
- ◆ The device are made with GAP/GaP Light Emitting Diode .
- ◆ RoHS compliant

|                   |   |
|-------------------|---|
| Under Development |   |
| Mass Production   | ● |

## Absolute Maximum Ratings

$T_{amb}=25^{\circ}\text{C}$ , unless otherwise specified

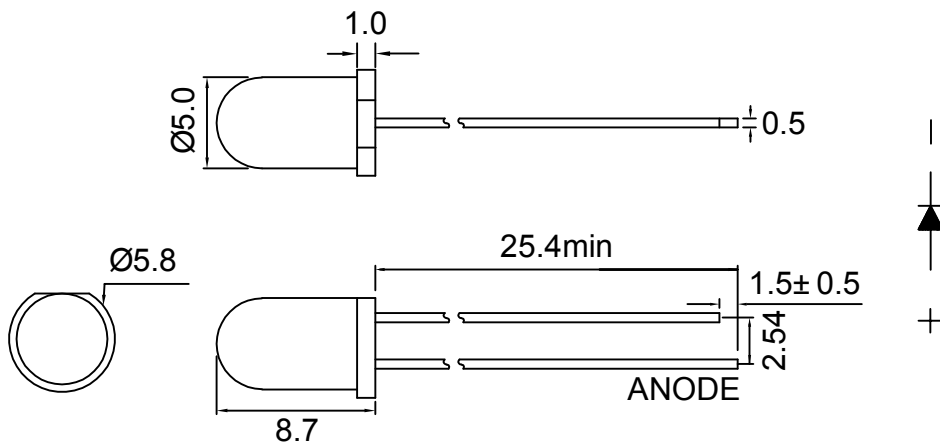
| Parameter                   | Test condition                          | Symbol    | Value   | Unit               |
|-----------------------------|---|-----------|---------|--------------------|
| DC Forward current          |   | $I_f$     | 20      | mA                 |
| Peak Forward current        | 1/10 duty cycle@1kHz                    | $I_{fp}$  | 100     | mA                 |
| Power dissipation           | $T_{amb}\leq 60^{\circ}\text{C}$        | $P_v$     | 75      | mW                 |
| Junction temperature        |   | $T_j$     | 85      | $^{\circ}\text{C}$ |
| Operating temperature range |   | $T_{amb}$ | -40~85  | $^{\circ}\text{C}$ |
| Storage temperature range   |   | $T_{stg}$ | -40~100 | $^{\circ}\text{C}$ |
| Soldering temperature       | $3\leq t\leq 5\text{s}$ , 2mm from body | $T_{sd}$  | 260     | $^{\circ}\text{C}$ |

## Optical and Electrical Characteristics

$T_{amb}=25^{\circ}\text{C}$ , unless otherwise specified

| Parameter           | Test condition    | symbol          | Min. | Typ. | Max. | unit          |
|---------------------|-------------------|-----------------|------|------|------|---------------|
| Dominant Wavelength | $I_f=20\text{mA}$ | $\lambda_d$     | 567  | 572  | 578  | nm            |
| Spectrum Half Width | $I_f=20\text{mA}$ | $\Delta\lambda$ |      | 30   |      | nm            |
| Forward Voltage     | $I_f=20\text{mA}$ | $V_f$           | 1.6  | 2.25 | 2.50 | v             |
| Reverse Current     | $V_r=5\text{v}$   | $I_r$           |      |      | 10   | $\mu\text{A}$ |
| Luminous Intensity  | $I_f=20\text{mA}$ | $I_v$           | 12.5 | 25   |      | mcd           |
| Full viewing angle  | $I_f=20\text{mA}$ | $2\theta_{1/2}$ |      | 65   |      | deg.          |

## Package dimensions & Internal Circuit Diagram



|           |                                     |
|-----------|-------------------------------------|
| Unit      | mm                                  |
| Scale     | —                                   |
| Rev.      | draft                               |
| Tolerance | $\pm 0.25$<br>angle $\pm 5^{\circ}$ |

|          |         |
|----------|---------|
| Drawer   | Spencer |
| Checked  |         |
| Approved |         |

We reserve the right to change to improve technical design and may do so without further notice.

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Date:09-Jun-09