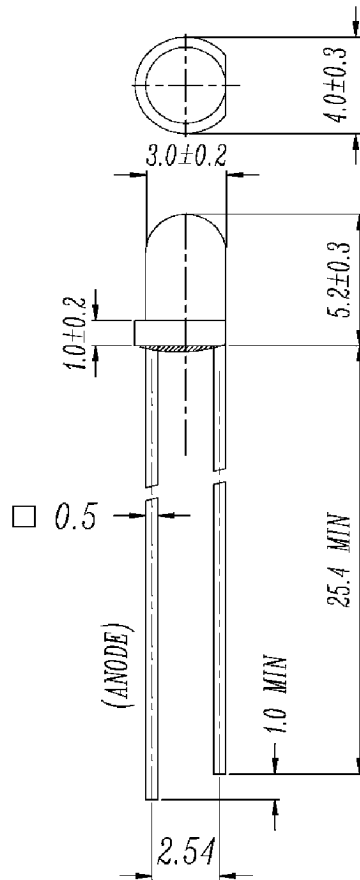


# IID2151

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This lamp is a T-1, 3 mm diameter package.



RoHS Compliant  
Aug 2004

| PART NO. | Chip      |                   | Lens Color   |
|----------|-----------|-------------------|--------------|
|          | Material  | Emitted Color     |              |
| IID2151  | GaAsP/GaP | Hi-Efficiency Red | Red Diffused |

\* Specifications subject to change without notice. Dimensions are in mm±0.25 unless stated otherwise.

IDEA, Inc., 1351 Titan Way, Brea, CA 92821 Ph:714-525-3302, 800-LED-IDEA; Fax: 714-525-3304 0507

**Absolute Maximum Ratings at  $T_a = 25\text{ }^\circ\text{C}$** 

| Parameter                                   | Symbol    | Rating      | Units            |
|---|-----------|-------------|------------------|
| Forward Current                             | $I_F$     | 30          | mA               |
| Operating Temperature                       | $T_{opr}$ | -40 to +85  | $^\circ\text{C}$ |
| Storage Temperature                         | $T_{stg}$ | -40 to +100 | $^\circ\text{C}$ |
| Soldering Temperature                       | $T_{sol}$ | $260 \pm 5$ | $^\circ\text{C}$ |
| Power Dissipation                           | $P_d$     | 100         | mW               |
| Peak Forward Current<br>(Duty 1/10 @ 1 KHz) | $I_{FP}$  | 160         | mA               |
| Reverse Voltage                             | $V_R$     | 5           | V                |

**Electronic Optical Characteristics**

| Parameter                       | Symbol          | Min. | Typ. | Max. | Units         | Condition            |
|---------------------------------|-----------------|------|------|------|---------------|----------------------|
| Luminous Intensity              | $I_V$           | 4.0  | 6.3  | —    | mcd           | $I_F = 20\text{ mA}$ |
| Viewing Angle                   | $2\theta_{1/2}$ | —    | 70   | —    | deg           | $I_F = 20\text{ mA}$ |
| Peak Wavelength                 | $\lambda_p$     | —    | 635  | —    | nm            | $I_F = 20\text{ mA}$ |
| Dominant Wavelength             | $\lambda_d$     | —    | 625  | —    | nm            | $I_F = 20\text{ mA}$ |
| Spectrum Radiation<br>Bandwidth | $\Delta\lambda$ | —    | 45   | —    | nm            | $I_F = 20\text{ mA}$ |
| Forward Voltage                 | $V_F$           | 1.7  | 2.0  | 2.4  | V             | $I_F = 20\text{ mA}$ |
| Reverse Current                 | $I_R$           | —    | —    | 10   | $\mu\text{A}$ | $V_R = 5\text{ V}$   |

\* Specifications subject to change without notice. Dimensions are in mm $\pm$ 0.25 unless stated otherwise.