

IEGC0118

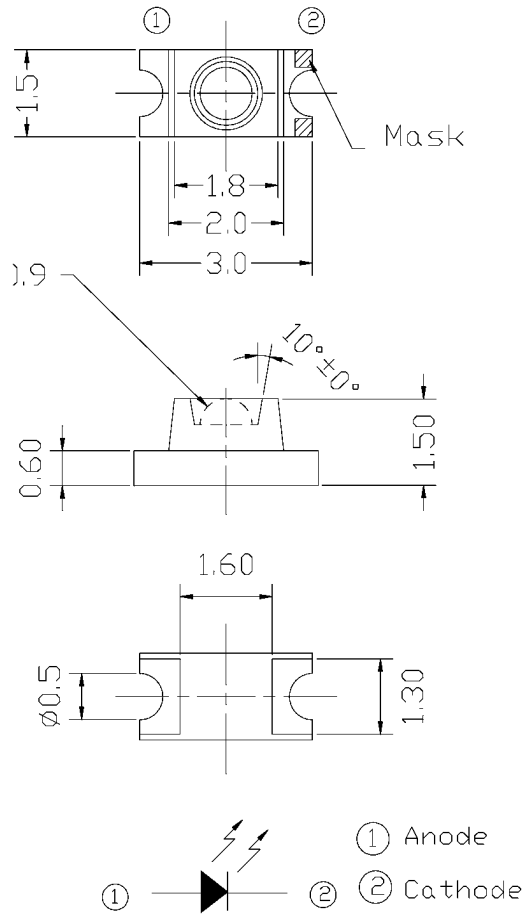
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This lamp is an infrared emitting diode in miniature top view flat SMD package. It is molded in a water clear plastic.



RoHS Compliant
Aug 2004



| PART NO. | Chip | | Lens Color |
|----------|----------|---------------|-------------|
| | Material | Emitted Color | |
| IEGC0118 | GaAlAs | IR | Water Clear |

* Specifications subject to change without notice. Dimensions are in mm±0.1 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 $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Units |
|--|-----------|------------|------------------|
| Continuous Forward Current | I_F | 65 | mA |
| Operating Temperature | T_{opr} | -40 to +85 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40 to +85 | $^\circ\text{C}$ |
| Soldering Temperature | T_{sol} | 260 | $^\circ\text{C}$ |
| Power Dissipation at (or below) 25°C Free Air Temperature | P_d | 130 | mW |
| Peak Forward Current (Pulse Width = $100\mu\text{s}$ and Duty = 1%) | I_{FP} | 1.0 | A |
| Reverse Voltage | V_R | 5 | V |

Electronic Optical Characteristics

| Parameter | Symbol | Min. | Typ. | Max | Units | Condition |
|--------------------|-----------------|------|------|------|---------------|--|
| Radiant Intensity | E_e | 0.5 | 1.6 | — | mW/sr | $I_F = 20\text{ mA}$ |
| | | — | 9.0 | — | | $I_F=100\text{mA}, t_p=100\mu\text{s}, t_p/T=0.01$ |
| | | — | 85 | — | | $I_F=1\text{A}, t_p=100\mu\text{s}, t_p/T=0.01$ |
| Peak Wavelength | λ_p | — | 940 | — | nm | $I_F = 20\text{ mA}$ |
| Spectral Bandwidth | $\Delta\lambda$ | — | 45 | — | nm | $I_F = 20\text{ mA}$ |
| Forward Voltage | V_F | — | 1.2 | 1.5 | V | $I_F = 20\text{ mA}$ |
| | | — | 1.4 | 1.85 | | $I_F=100\text{mA}, t_p=100\mu\text{s}, t_p/T=0.01$ |
| | | — | 2.6 | 4.0 | | $I_F=1\text{A}, t_p=100\mu\text{s}, t_p/T=0.01$ |
| Reverse Current | I_R | — | — | 10 | μA | $V_R = 5\text{ V}$ |
| View Angle | $2\theta_{1/2}$ | — | 100 | — | deg | $I_F = 20\text{ mA}$ |

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