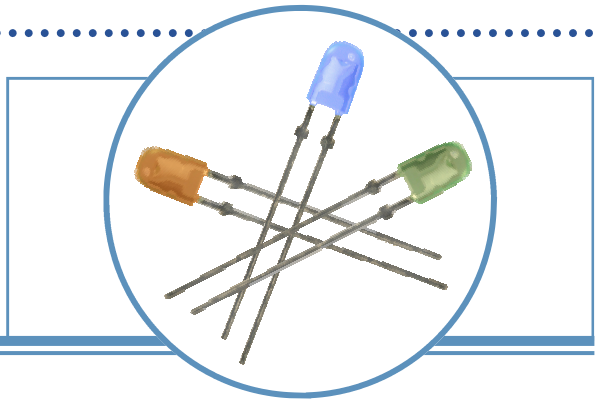
# Oval Green LED Lamp (3mm)

TT electronics
OPTEK Technology

## OVLKGGT6

- High luminous intensity
- Defined spatial radiation
- Multiple viewing angles
- UV-resistant epoxy
- Precision optical performance

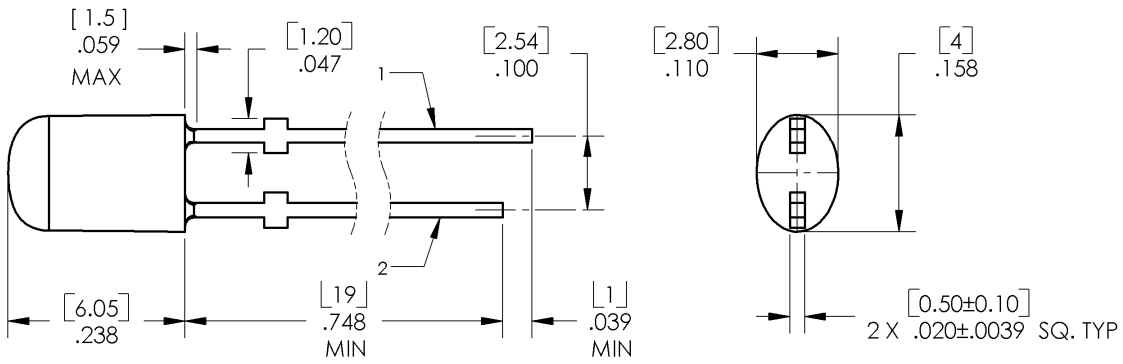


The OVLKGGT6 is designed for superior performance in outdoor environments. Its radiation pattern matches blue (OVLKBGT6) and red-orange (OVLKQGT6) devices in identical packages to create LED pixels for full-color video screens.

### Applications

- Variable Message Signs
- Indoor/Outdoor Advertising Signage
- Traffic and Highway Signs
- Full-Color Video Signs

| Part Number | Material | Emitted Color | Intensity Typ. mcd | Lens Color |
|---|---|---|---|---|
| OVLKGGT6 | InGaN | Green | 1100 | Green Diffused |




1 ANODE 2 CATHODE

DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

RoHS

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

*Data is subject to change without prior notice.*

**OPTEK Technology Inc.** — 1645 Wallace Drive, Carrollton, Texas 75006
Phone: (972) 323-2200 or (800) 341-4747 FAX: (972) 323-2396 visibleLED@optekinc.com www.optekinc.com

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OVLKGGT6

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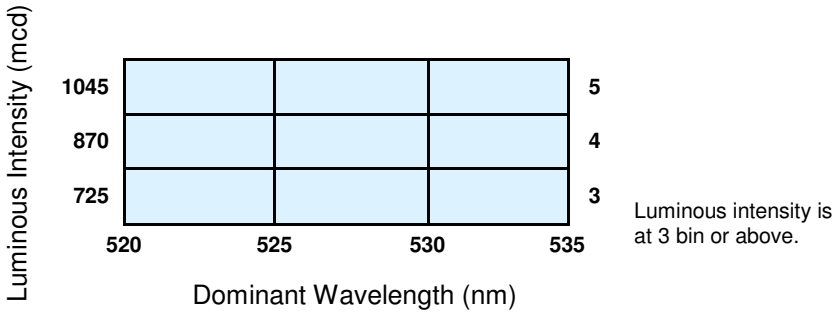
## Absolute Maximum Ratings
$T_A$ = 25° C unless otherwise noted

| | |
|---|---|
| Storage Temperature Range | -40 ~ +100 ℃ |
| Operating Temperature Range | -30 ~ +80 ℃ |
| Reverse Voltage | 5 V |
| Continuous Forward Current | 30 mA |
| Peak Forward Current (10% Duty Cycle, 1KHz) | 100 mA |
| Power Dissipation | 120 mW |
| Lead Soldering Temperature (5 seconds max) | 260° C |

## Electrical Characteristics
$T_A$ = 25° C unless otherwise noted

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS |
|---|---|---|---|---|---|---|
| $I_V$ | Luminous Intensity | 725 | 1100 | ---- | mcd | $I_F$ = 20 mA |
| $V_F$ | Forward Voltage | ---- | 3.3 | 3.9 | V | $I_F$ = 20 mA |
| $I_R$ | Reverse Current | ---- | ---- | 2 | µA | $V_R$ = 5V |
| $\lambda_D$ | Dominant Wavelength | 520 | 525 | 535 | nm | $I_F$ = 20 mA |
| 2 Θ½ | 50% Power Angle | ---- | x: 100<br>y: 60 | ---- | deg | $I_F$ = 20 mA |

## Standard Bins ($I_F$ = 20mA)
Lamps are sorted to luminous intensity ($I_V$) and dominant wavelength ($\lambda_D$) bins shown.
Orders for OVLKGGT6 may be filled with any or all bins contained as below.




**Important Notes:**
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.
3. When soldering, leave 2.5mm minimum clearance between the resin base and the soldering point.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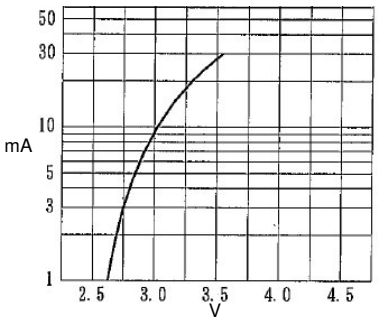
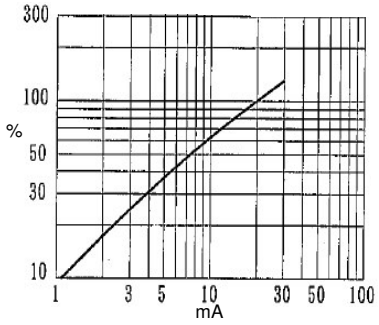
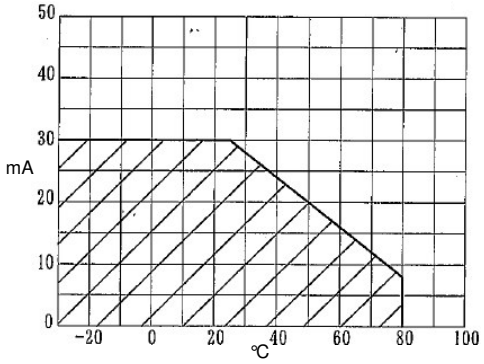
## Typical Electro-Optical Characteristics Curves



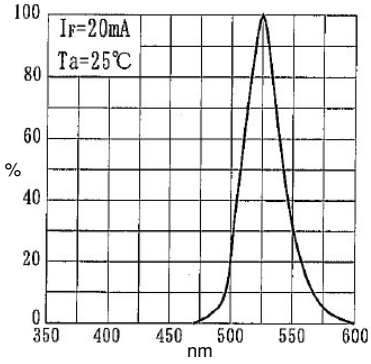

Forward Current vs. Forward Voltage



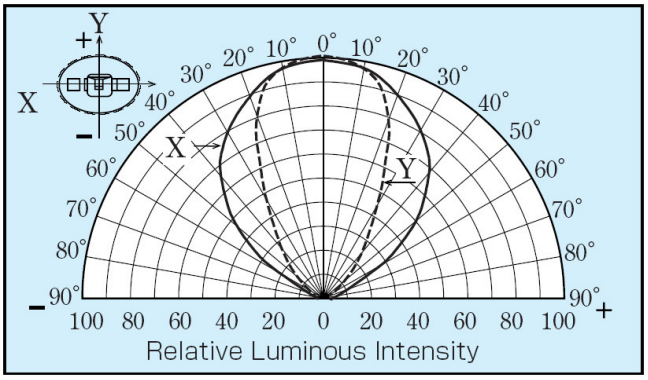

Relative Luminous Intensity vs. Forward Current




Maximum Forward DC Current vs. Ambient Temperature




Relative Luminous Intensity vs. Wavelength



| Issue | Change Description | Approval | Date |
|---|---|---|---|
| 1.0 | Initial Release | J. Haynie | 5/26/05 |
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