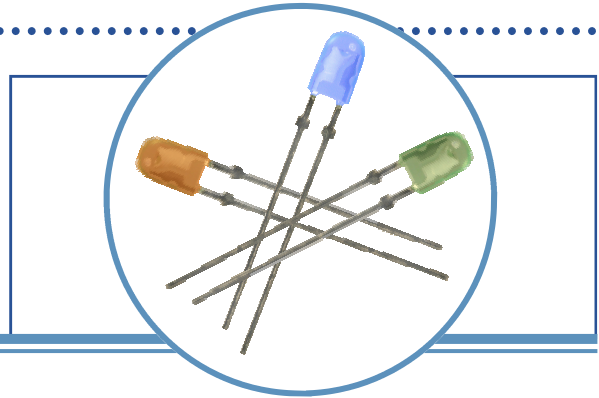


Oval Red-Orange LED Lamp (3mm) **OPTEK Technology**

OVLKQGT6

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

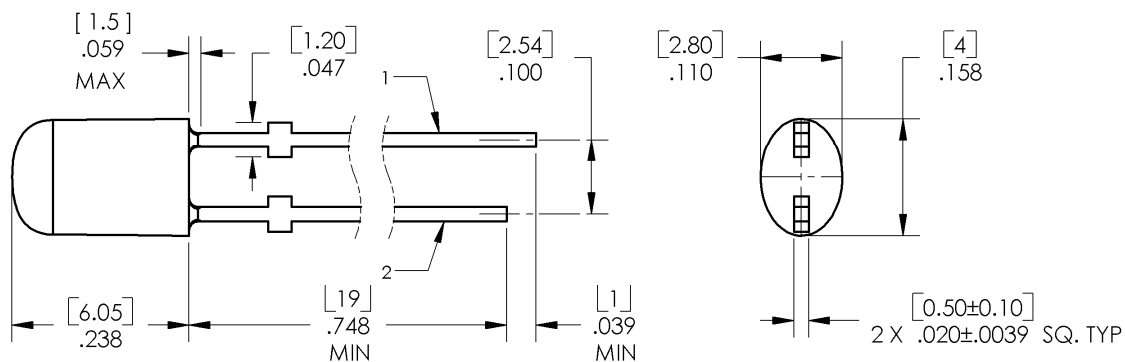


The OVLKQGT6 is designed for superior performance in outdoor environments. Its radiation pattern matches green (OVLKGGT6) and blue (OVLKBGT6) devices in identical packages to create LED pixels for full-color video screens.

Applications

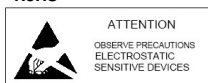
- Variable Message Signs
- Indoor/Outdoor Advertising Signage
- Traffic and Highway Signs
- Full-Color Video Signs

| Part Number | Material | Emitted Color | Intensity Typ. mcd | Lens Color |
|-------------|----------|---------------|--------------------|-----------------|
| OVLKQGT6 | AllnGaP | Red-Orange | 430 | Orange Diffused |



1 ANODE 2 CATHODE

DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



Data is subject to change without prior notice.

Oval Red-Orange LED Lamp (3mm)

OVLKQGT6

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ unless otherwise noted

| | |
|---------------------------------------------|---------------|
| Storage Temperature Range | -30 ~ +100 °C |
| Operating Temperature Range | -30 ~ +85 °C |
| Reverse Voltage | 3 V |
| Continuous Forward Current | 30 mA |
| Peak Forward Current (10% Duty Cycle, 1KHz) | 100 mA |
| Power Dissipation | 80 mW |
| Lead Soldering Temperature (5 seconds max) | 260 °C |

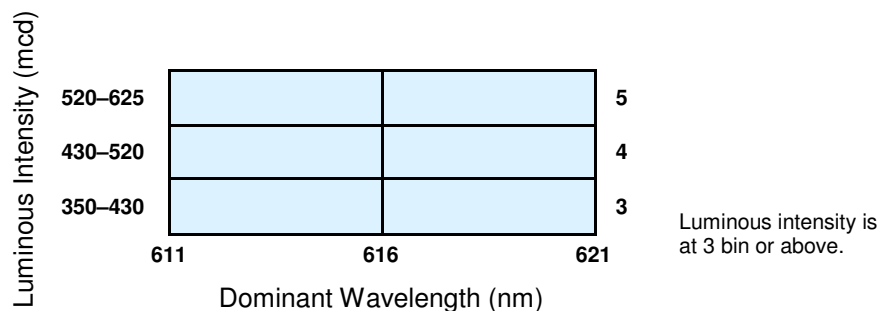
Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS |
|-----------------|---------------------|------|-----------------|------|---------------|----------------------|
| I_V | Luminous Intensity | 350 | 430 | ---- | mcd | $I_F = 20\text{ mA}$ |
| V_F | Forward Voltage | ---- | 2.1 | 2.7 | V | $I_F = 20\text{ mA}$ |
| I_R | Reverse Current | ---- | ---- | 50 | μA | $V_R = 3\text{V}$ |
| λ_D | Dominant Wavelength | 611 | 616 | 621 | nm | $I_F = 20\text{ mA}$ |
| $2\theta_{1/2}$ | 50% Power Angle | ---- | x: 100 y: 60 | ---- | deg | $I_F = 20\text{ mA}$ |

Standard Bins ($I_F = 20\text{mA}$)

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVLKQGT6 may be filled with any or all bins contained as below.

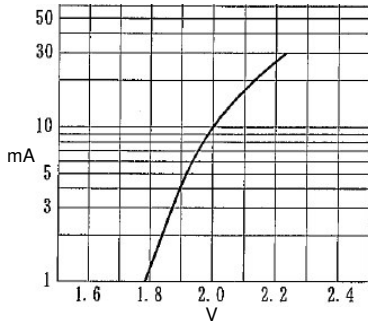


Important Notes:

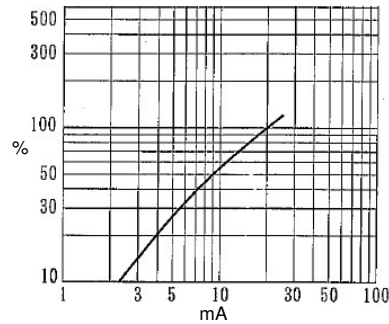
- All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- To designate luminous intensity ranks, please contact OPTEK.
- When soldering, leave 2.5mm minimum clearance between the resin base and the soldering point.

Oval Red-Orange LED Lamp (3mm) OVLKQGT6

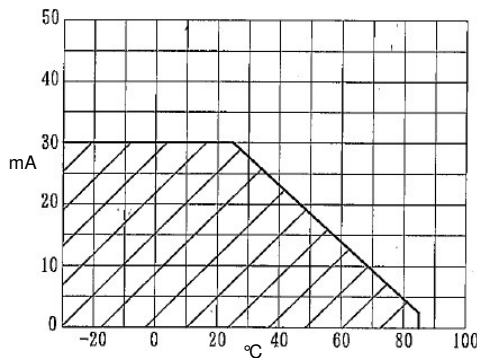
Typical Electro-Optical Characteristics Curves



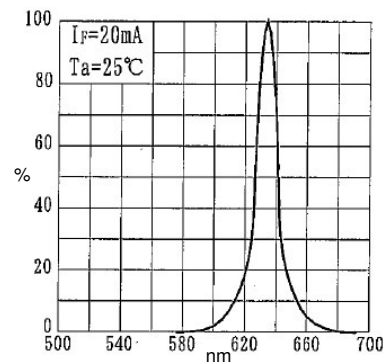
Forward Current vs. Forward Voltage



Relative Luminous Intensity vs. Forward Current



Maximum Forward DC Current vs. Ambient Temperature



Relative Luminous Intensity vs. Wavelength

