

# EPIGAP Optronik GmbH

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## Data sheet

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### Red LED

EOLD-625-333

Rev. 02, 2017

| Radiation | Type    | Case                          |
|-----------|---------|-------------------------------|
| Red       | AlInGaP | 3 mm water clear plastic lens |

| Description:  |
|---|
| <p style="text-align: right;">All dimensions in mm</p>  |
| <ul style="list-style-type: none"> <li>- Super bright LED</li> <li>- Emitted color: red</li> <li>- Without stand-off</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> </div> |

### Maximum Ratings

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

| Parameter                   | Test Conditions                     | Symbol    | Value      | Unit               |
|-----------------------------|-------------------------------------|-----------|------------|--------------------|
| Power dissipation           |                                     | $P_D$     | 125        | mW                 |
| Continuous forward current  |                                     | $I_F$     | 50         | mA                 |
| Peak forward current        | 1/10 duty cycle @ 1 kHz             | $I_{FP}$  | 100        | mA                 |
| Reverse voltage             |                                     | $V_R$     | 5          | V                  |
| Reverse current             | $V_R = 5\text{ V}$                  | $I_R$     | 10         | $\mu\text{A}$      |
| Operating temperature range |                                     | $T_{amb}$ | -40 to +85 | $^{\circ}\text{C}$ |
| Storage temperature range   |                                     | $T_{stg}$ | -40 to +85 | $^{\circ}\text{C}$ |
| Lead soldering temperature  | $t = 3\text{ s}$ , 1.6 mm from case | $T_{slg}$ | 260        | $^{\circ}\text{C}$ |

### Optical and Electrical Characteristics

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

| Parameter           | Symbol                | Conditions           | Min  | Typ  | Max | Unit |
|---------------------|-----------------------|----------------------|------|------|-----|------|
| Forward voltage     | $V_F$                 | $I_F = 20\text{ mA}$ |      | 2.2  | 2.7 | V    |
| Peak wavelength     | $\lambda_p$           | $I_F = 20\text{ mA}$ |      | 630  |     | nm   |
| Dominant wavelength | $\lambda_D$           | $I_F = 20\text{ mA}$ |      | 625  |     | nm   |
| FWHM                | $\Delta\lambda_{0.5}$ | $I_F = 20\text{ mA}$ |      | 20   |     | nm   |
| Viewing angle       | $\varphi$             | $I_F = 20\text{ mA}$ |      | 30   |     | deg. |
| Luminous intensity  | $I_V$                 | $I_F = 20\text{ mA}$ | 3300 | 5000 |     | mcd  |

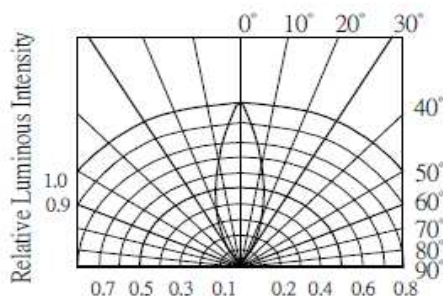
We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

**Data sheet**

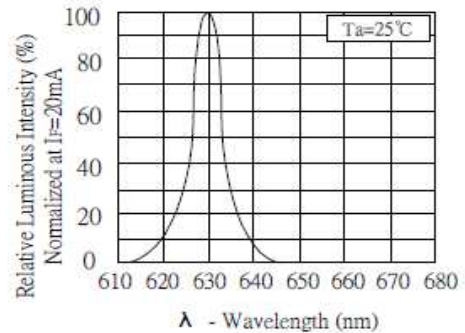
**Red LED**

**EOLD-625-333**

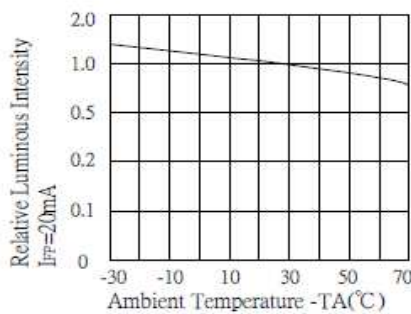
**TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES**



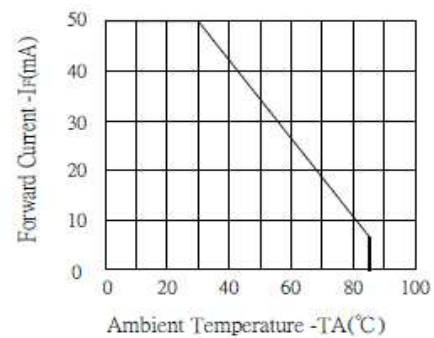
**RADIATION DIAGRAM**



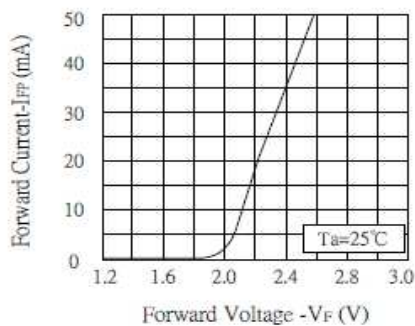
**RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH**



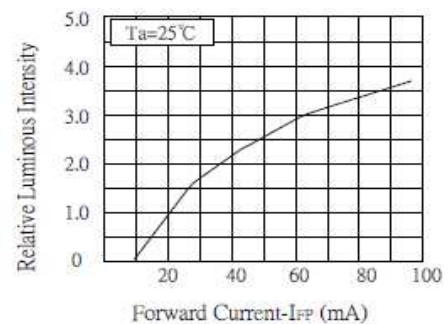
**LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE**



**MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY Vs. FORWARD CURRENT**

Art. No. 131 037



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