

EPIGAP Optronik GmbH

Koepenicker Str. 325b
 D-12555 Berlin
 Fon: +49 (0)30 657637 60
 Fax: +49 (0)30 657637 70
 sales@epigap-optronic.de



Data sheet

page 1 of 2

Deep red LED

EOLD-660-343

Rev. 03, 2017

| Radiation | Type | Case |
|-----------|--------|-------------------|
| Deep red | AlGaAs | 3 mm plastic lens |

| Description: |
|--|
| |
| <ul style="list-style-type: none"> - Super bright LED - Lens color - water clear - High luminous intensity - ROHS conform <p>All dimensions in mm</p> <div style="display: flex; justify-content: space-around;"> </div> |

Maximum Ratings

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

| Parameter | Test Conditions | Symbol | Value | Unit |
|-----------------------------|--------------------------------------|-----------|------------|--------------------|
| Power dissipation | | P_D | 80 | mW |
| Peak forward current | Duty cycle 1/10 @ 1 kHz | I_{FP} | 50 | mA |
| Continuous forward current | | I_F | 30 | mA |
| Reverse voltage | $I_R = 10 \mu\text{A}$ | V_R | 5 | V |
| 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 | $I_F = 20 \text{ mA}$ | | 1.9 | 2.4 | V |
| Reverse current | I_R | $V_R = 5 \text{ V}$ | | | 10 | μA |
| Peak wavelength | λ_p | $I_F = 20 \text{ mA}$ | | 660 | | nm |
| Dominant wavelength | λ_D | $I_F = 20 \text{ mA}$ | | 645 | | nm |
| FWHM | $\Delta\lambda_{0.5}$ | $I_F = 20 \text{ mA}$ | | 25 | | nm |
| Viewing angle | ϕ | $I_F = 20 \text{ mA}$ | | 20 | | deg. |
| Luminous intensity | I_V | $I_F = 20 \text{ mA}$ | 860 | 1300 | | mcd |

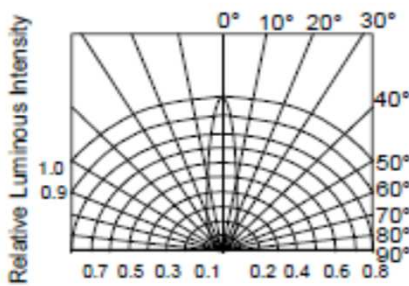
We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

Data sheet

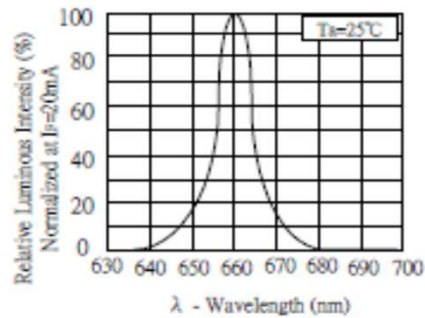
Deep red LED

EOLD-660-343

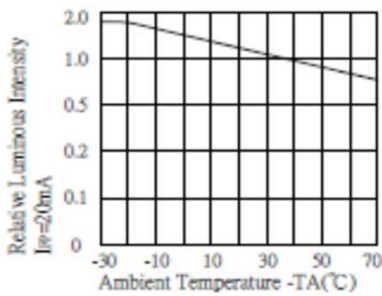
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



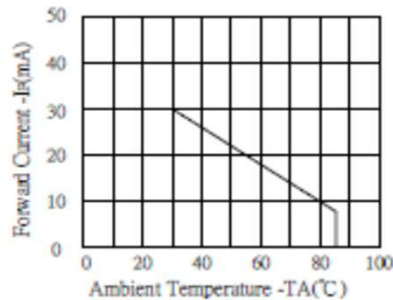
RADIATION DIAGRAM



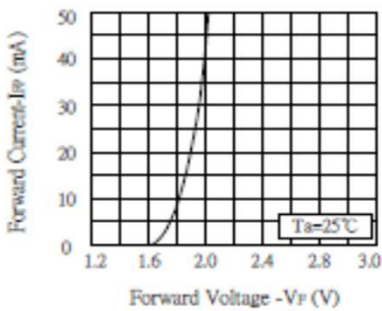
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



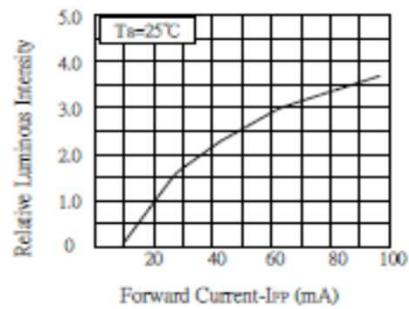
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

Art. No. 131 012



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.