

# EPIGAP Optronik GmbH

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## Data Sheet

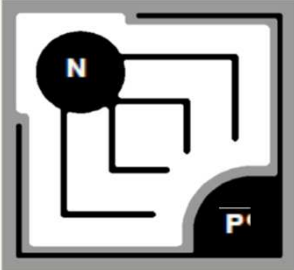

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### LED Chip Red

EOLC-635-34

Rev. 04, 2017

Radiation	Type	Electrodes
Red	AlGaInP / sapphire	N + P electrode up

	<p>Chip size <math>300 \times 300 \pm 25 \mu\text{m}</math> Thickness <math>100 \pm 15 \mu\text{m}</math> Bonding pads <math>\varnothing 90 \pm 10 \mu\text{m}</math></p> <p>N-electrode      P-electrode</p> 	<p>Metallization electrodes: Au alloy Transparent structure Horizontal electrodes Non-conductive substrate High luminous intensity</p>
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### Optical and Electrical Characteristics

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

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	$V_F$	1.8		2.5	V
Reverse current	$V_R = 10 \text{ V}$	$I_R$			5	$\mu\text{A}$
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$		635		nm
Dominant wavelength	$I_F = 20 \text{ mA}$	$\lambda_d$	619		629	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		18		nm
Luminous intensity*	$I_F = 20 \text{ mA}$	$I_V$	500	600	750	mcd

\*Measured on bare chip on TO-18 header

### Packing

Chips on adhesive film with wire-bond side top



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.

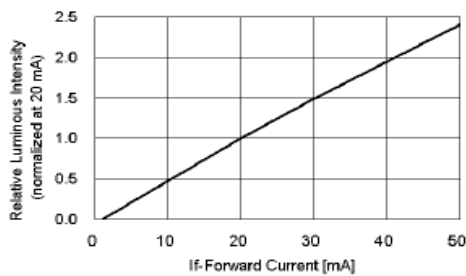
**Data Sheet**

**LED Chip Red**

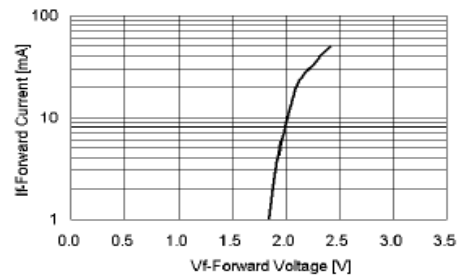
**EOLC-635-34**

**Characteristic Curves:**

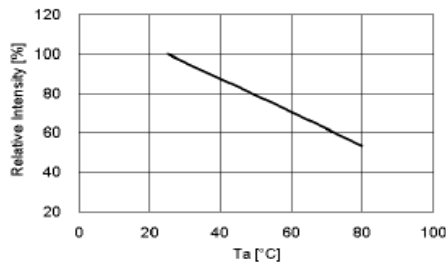
**Fig.1 – Relative luminous Intensity vs. Forward Current**



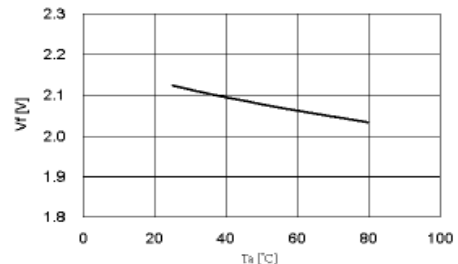
**Fig.2 – Forward Current vs. Forward Voltage**



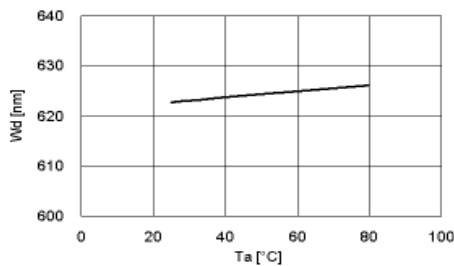
**Fig.3 – Relative Intensity (@20mA) vs. Ambient Temperature**



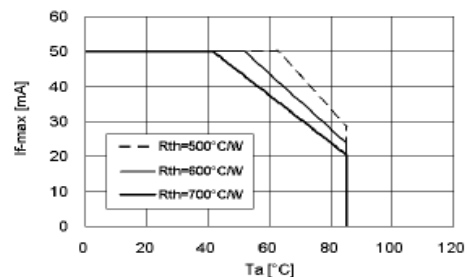
**Fig.4 – Forward Voltage (@20mA) vs. Ambient Temperature**



**Fig.5 – Dominant Wavelength (@20mA) vs. Ambient Temperature**



**Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 115°C)**



Art. No. 112 017



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