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Data Sheet

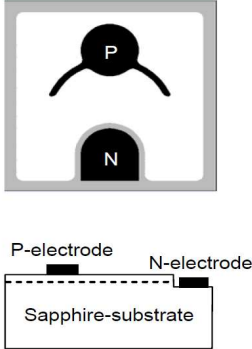
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LED Chip blue

EOLC-460-34

Rev. 01, 2015

Radiation	Type	Electrodes
Blue	InGaN / sapphire	N+P-up

	Chip size: 13 mil x 13 mil ($330 \pm 25 \mu\text{m} \times 330 \pm 25 \mu\text{m}$) Thickness: 3.5 mil ($90 \pm 10 \mu\text{m}$) N, P bonding pads: $\varnothing 3.5 \text{ mil}$ ($\varnothing 90 \pm 25 \mu\text{m}$), Au alloy 100% probing test Passivation layer on top
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Absolute Maximum Ratings

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

Parameter	Symbol	Rating	Unit
Forward DC current	I_F	30	mA
Reverse voltage	I_R	5	V
Junction temperature	T_J	115	$^\circ\text{C}$
Storage temperature chip	T_{STG}	-40...+85	$^\circ\text{C}$
Storage temperature chip on tape	T_{STG}	+0...+40	$^\circ\text{C}$
Transport. temperature chip on tape	T_{STG}	-20...+65	$^\circ\text{C}$
Soldering temperature	T_{SOL}	+280 (10 sec)	$^\circ\text{C}$

Optical and Electrical Characteristics

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

Parameter	Symbol	Cond.	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10 \mu\text{A}$	2.0			V
Forward voltage	V_F	$I_F = 20 \text{ mA}$	2.8		3.6	V
Reverse current	I_R	$V_R = 5 \text{ V}$			2	μA
Radiant flux	I_V	$I_F = 20 \text{ mA}$	125	150		mcd
Dominant wavelength	λ_D	$I_F = 20 \text{ mA}$	455	460	465	nm
FWHM	$\Delta\lambda$	$I_F = 20 \text{ mA}$		25		nm

*Measured on gold plate without an encapsulant

Packing

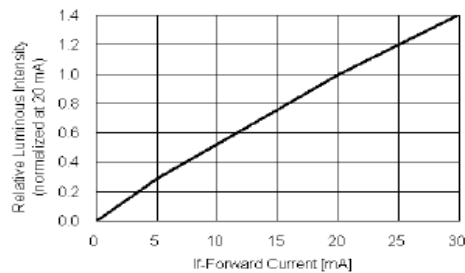
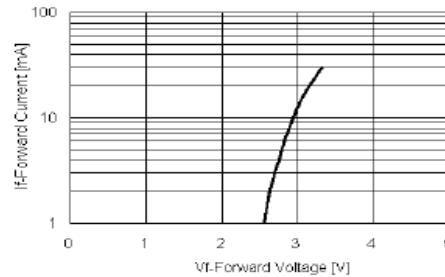
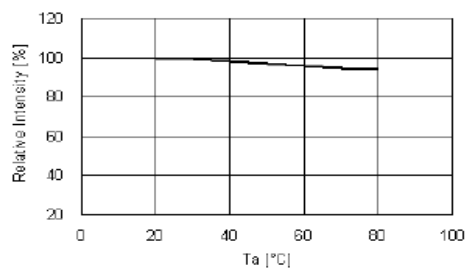
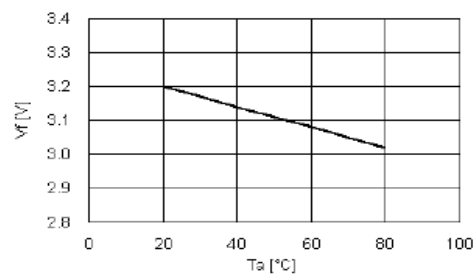
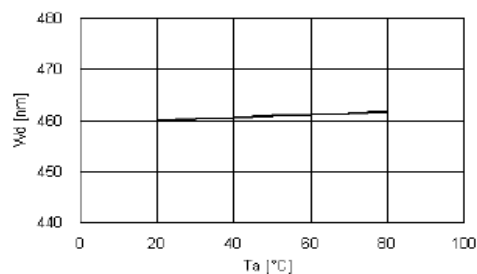
Dice on adhesive film with wire-bond on top



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.

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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 (Derating based on TJ max. = 115°C)**