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Data Sheet

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LED Chip blue

EOLC-465-31-1

Rev. 01, 2017

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

Chip size: 45 mil x 45 mil (1143 ± 25 μm x 1143 ± 25 μm)

Thickness: 5.9 mil (150 ± 10 μm)

N, P bonding pads: 3.9 mil (90 ± 10 μm), Au alloy

Backside metal: Al alloy

Absolute Maximum Ratings

T_{amb} = 25°C, unless otherwise specified

Parameter	Symbol	Rating	Unit
Forward DC current	I _F	700	mA
Reverse voltage	V _R	5	V
Junction temperature	T _J	125	°C
Storage temperature chip	T _{STG}	-40...+85	°C
Storage temperature chip on tape	T _{STG}	+5...+35	°C
Transport. temperature chip on tape	T _{STG}	-20...+65	°C
Soldering temperature	T _{SOL}	+280 (<10 sec)	°C
ESD withstand voltage	V _{ESD}	2	kV

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Symbol	Cond.	Min	Typ	Max	Unit
Forward voltage	V _F	I _F =10 μA	1.6			V
Forward voltage	V _F	I _F =350 mA		3	3.4	V
Reverse current	I _R	V _R =5 V			1	μA
Radiant power	I _V	I _F =350 mA	420	450	480	mW
Dominant wavelength	λ _D	I _F =350 mA	455	460	465	nm
FWHM	Δλ _{0.5}	I _F =350 mA		25		nm



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

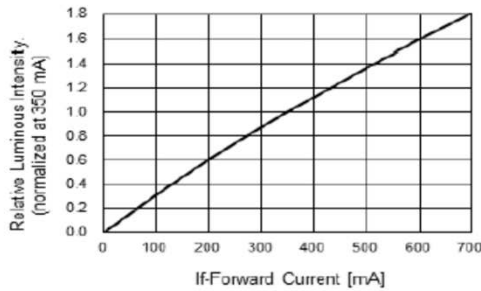


Fig.2 – Forward Current vs. Forward Voltage

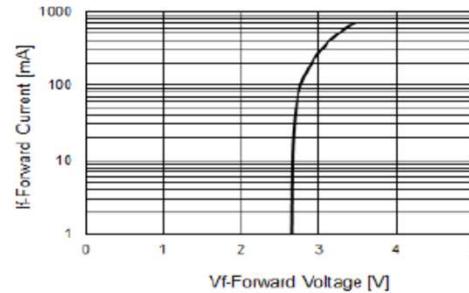


Fig.3 – Relative Intensity (@350mA) vs. Ambient Temperature

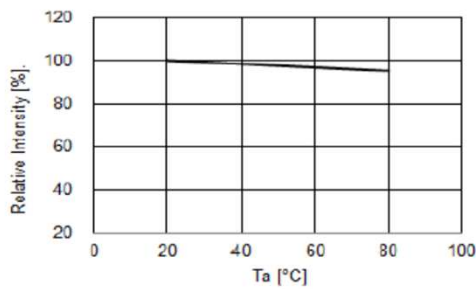


Fig.4 – Forward Voltage (@350mA) vs. Ambient Temperature

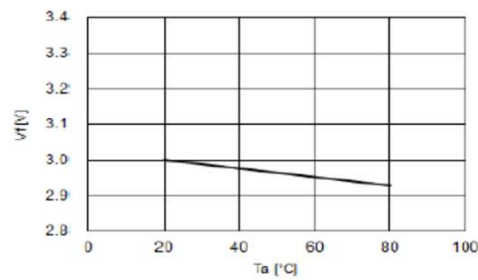


Fig.5 – Dominant Wavelength (@350mA) vs. Ambient Temperature

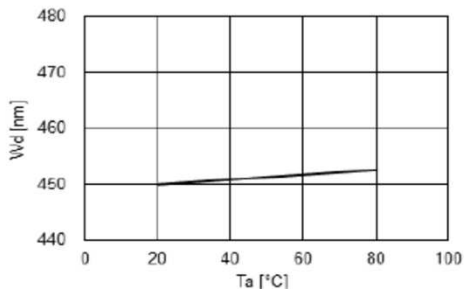
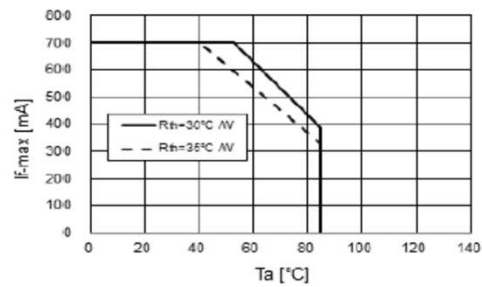


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)



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