EPIGAP OSA

DATASHEET

EOLC-460-34-2

Blue InGaN LED Chip

Features:

- Size: 305 µm
- Thickness: 110 µm
- p/n up / Au alloy
- Sapphire substrate

Applications:

- Lighting
- Fluorescence
- Sensing

RoHS COMPLIANT Pb-Free

Typical Electro-Optical Characteristics

Measurement conditions $T_{ambient}$ = 25 °C

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Emitting Color	Blue					
Forward Voltage	V_f	I_f = 20 mA		2.9	3.2	V
Dominant Wavelength	λ_D	I_f = 20 mA	450		470	nm
FWHM	$\Delta\lambda$	I_f = 20 mA		25		nm
Radiant Flux	P_o	I_f = 20 mA	28	32		mW
Reverse Current	I_R	V_R = 5 V			10	µA

Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Forward Current (T = 25°C)	$I_{f, max}$		50	mA
Reverse Voltage	V_R		5	V
Junction Temperature	T_J		+125	K/W
Operating Temperature	T_{op}	-40	+85	°C
Storage Temperature	T_{St}	+5	+35	°C

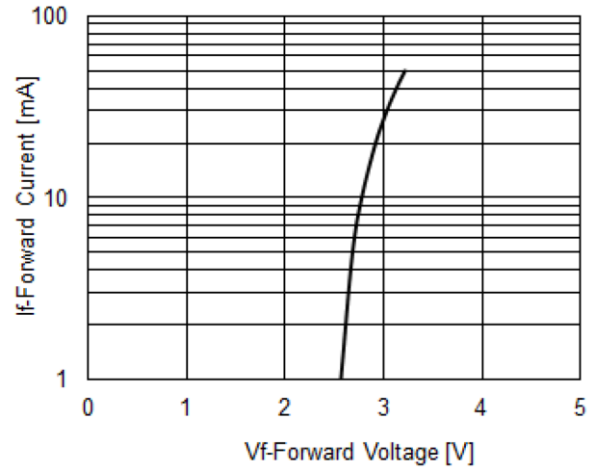
ESD protection recommended, $V_{ESD,HBM}$ <2 KV

Mechanical Dimensions

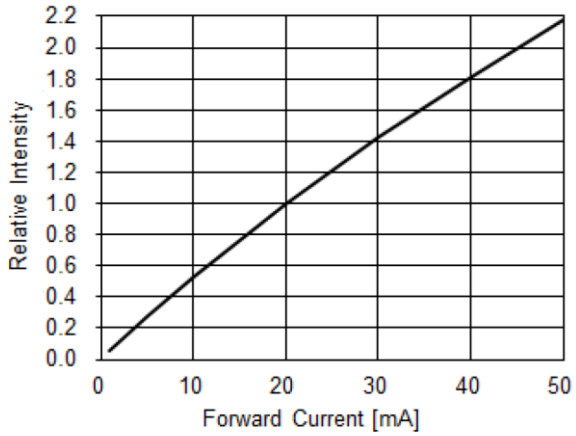
Parameter	Value		Unit
Chip size	305	±25	µm
Thickness	110	±10	µm
P-pad (top) / Au alloy	90	±10	µm
N-pad (top) / Au alloy	90	±10	µm

Temperature during packaging: 280°C <10 s

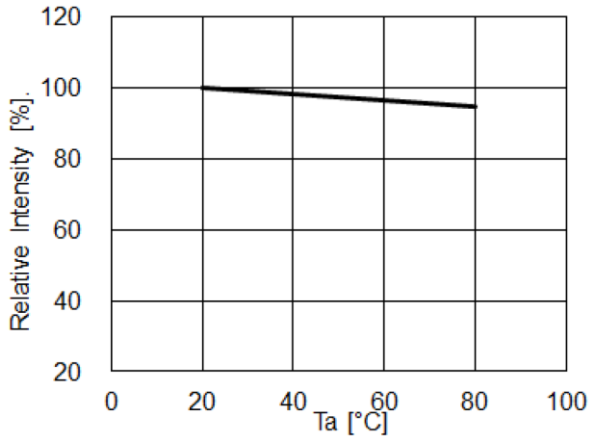
Typical Performance



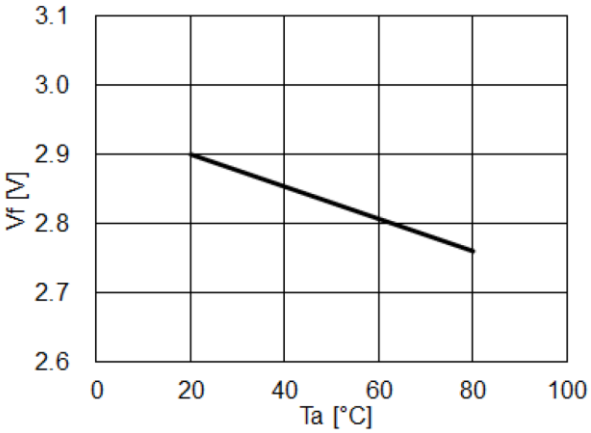
Forward Current vs. Forward Voltage



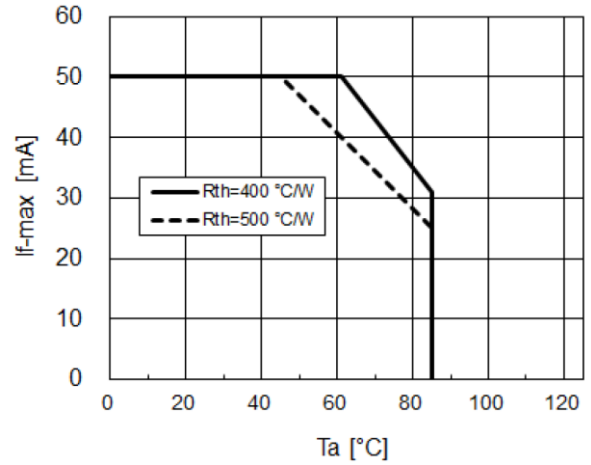
Relative Intensity vs. Forward Current



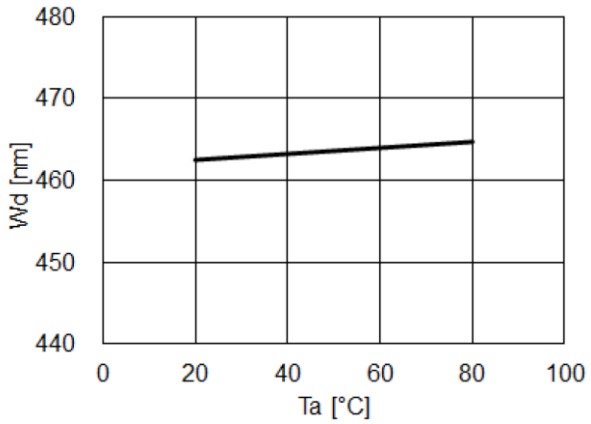
Relative Intensity vs. Ambient Temperature



Forward Voltage vs. Ambient Temperature

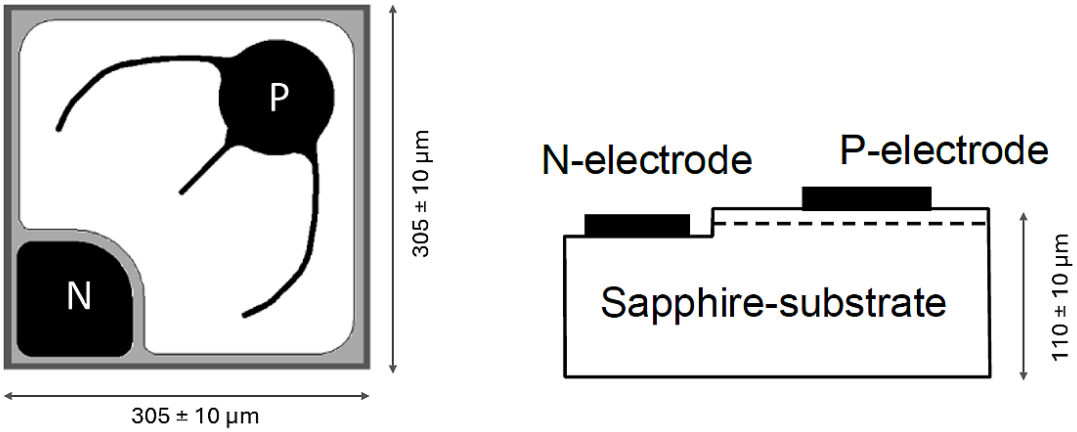


Maximum Ratings



Dominant Wavelength vs. Ambient Temperature

Outline Drawing



Dice delivered on adhesive film with bond side on top.

Notice

The information describes the type of component and shall not consider as assured characteristics. Terms of delivery and rights to change reserved. The data sheet may change without prior notification; the only valid issue and current revision can be on our website. Due to technical requirements, components may contain dangerous substances.
It is the responsibility of the customer to evaluate and ensure that the use of the products in their specific applications complies with relevant safety standards and regulations. Customers must assess the exposure conditions within their systems and ensure that appropriate measures are taken to prevent exceeding the permissible exposure limits outlined in IEC 62471. EPIGAP OSA Photonics GmbH does not assume liability for any non-compliance arising from the integration or usage of LEDs in customer systems.
Parameters can vary in different applications. The customer must validate all operating parameters for each application. EPIGAP OSA Photonics GmbH does not have the responsibility for the reliability and the degradation behavior of products made with EPIGAP OSA Photonics GmbH diodes as they depend not only on the product itself but also on the operation, manufacturing or design of the final products. The customer is responsible for ensuring the long-term stability of the product according to their requirements. If components are used in toys or life support systems, EPIGAP OSA Photonics GmbH must expressly authorize the use of the components prior to incorporating them into the customer's systems!
Packaging: EPIGAP OSA Photonics GmbH uses recyclable packages.

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