

EPIGAP Optronik GmbH

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



Data Sheet

Preliminary

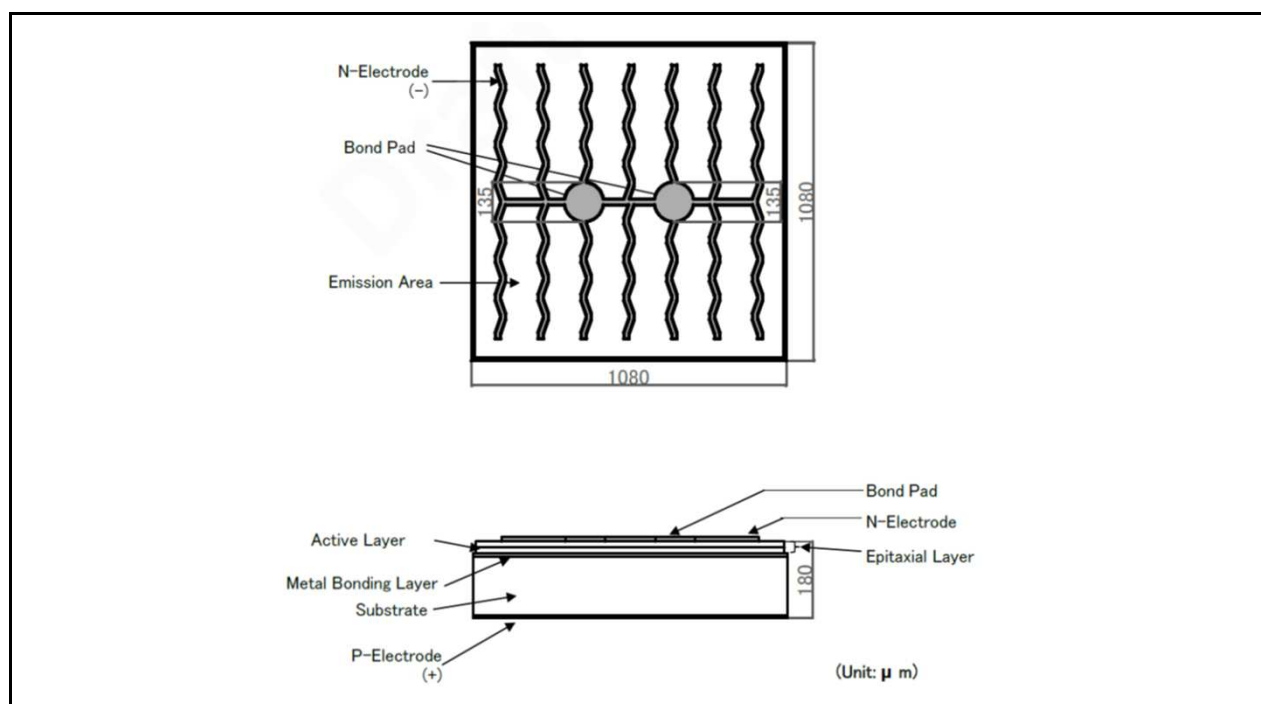
Page 1 of 4

Infrared LED Chip

EOLC-1300-21

Rev. 01, 2019

Radiation	Type	Electrodes
Infrared	InGaAs - based material	n (cathode) up



Die size (typ.): 1.080 mm × 1.080 mm (42 mil)

Thickness (typ.): 0.180 mm (7 mil)

Bond pads size: Ø 0.130 mm (periphery = Ø 0.135 mm)

Contact metallization anode and cathode: gold alloy

Maximum Ratings

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

Parameter	Test Conditions	Symbol	Value	Unit
Continuous forward current*		I _F	1000	mA
Reverse current		I _R	10	μA

*For reference only



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.

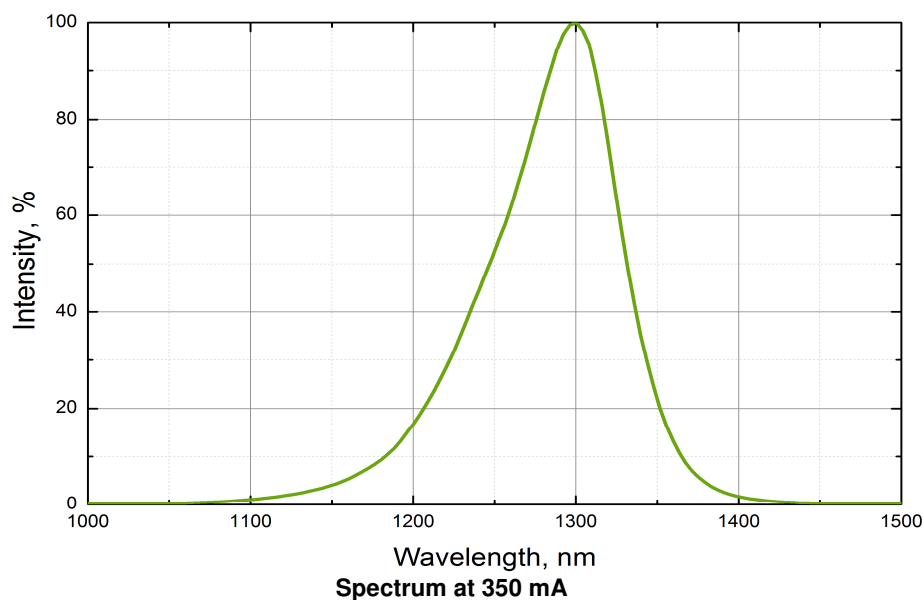
Data Sheet**Preliminary****Page 2 of 4****Infrared LED Chip****EOLC-1300-21**

Rev. 01, 2019

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

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20\text{ mA}$	V_F		0.84		V
Radiant power*	$I_F = 20\text{ mA}$	Φ_e		4.6		mW
Peak wavelength	$I_F = 20\text{ mA}$	λ_p		1300		nm
FWHM	$I_F = 20\text{ mA}$	$\Delta\lambda_{0.5}$		60		nm
Forward voltage	$I_F = 350\text{ mA}$	V_F		1.06		V
Radiant power*	$I_F = 350\text{ mA}$	Φ_e		50		mW
Peak wavelength	$I_F = 350\text{ mA}$	λ_p		1300		nm
FWHM	$I_F = 350\text{ mA}$	$\Delta\lambda_{0.5}$		78		nm
Forward voltage	$I_F = 1000\text{ mA}$	V_F		1.28		V
Radiant power*	$I_F = 1000\text{ mA}$	Φ_e		85		mW
Peak wavelength	$I_F = 1000\text{ mA}$	λ_p		1308		nm
FWHM	$I_F = 1000\text{ mA}$	$\Delta\lambda_{0.5}$		94		nm

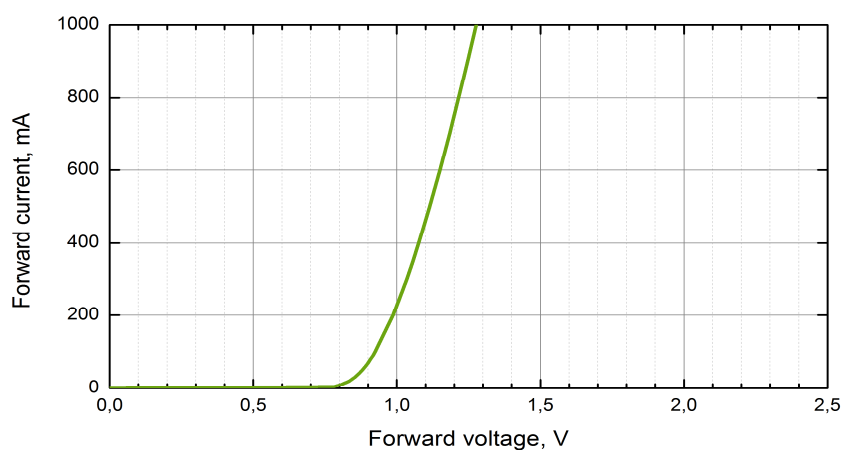
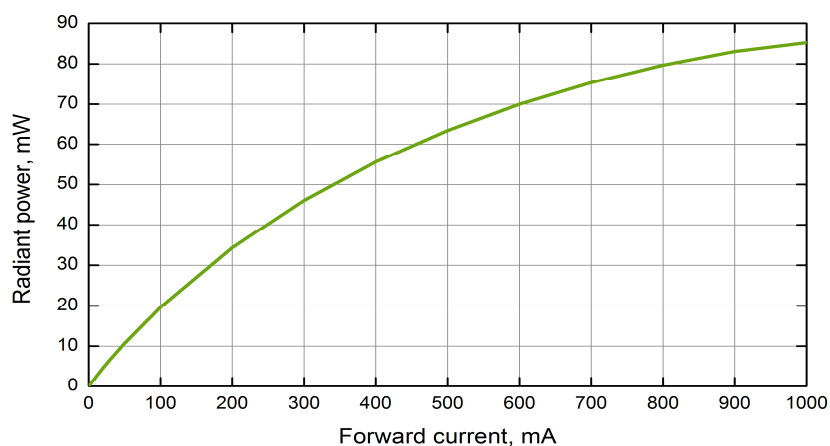
*Measured on silicon covered chip on star board



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**Preliminary****Page 3 of 4****Infrared LED Chip****EOLC-1300-21**

Rev. 01, 2019

**Forward current vs. forward voltage****Radiant power vs. forward current (silicon covered chip on star board)**

EPIGAP Optronic GmbH

Koepenicker Str. 325

D-12555 Berlin

Fon: +49 (0)30 657637 60

Fax: +49 (0)30 657637 70

sales@epigap-optronic.de



Data Sheet

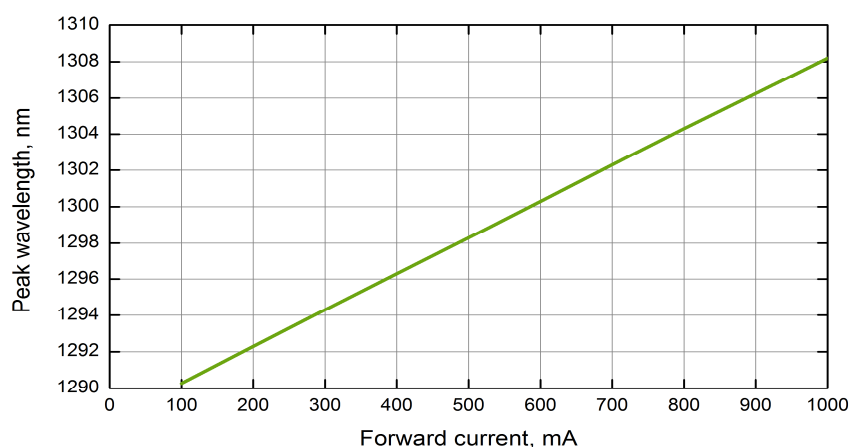
Preliminary

Page 4 of 4

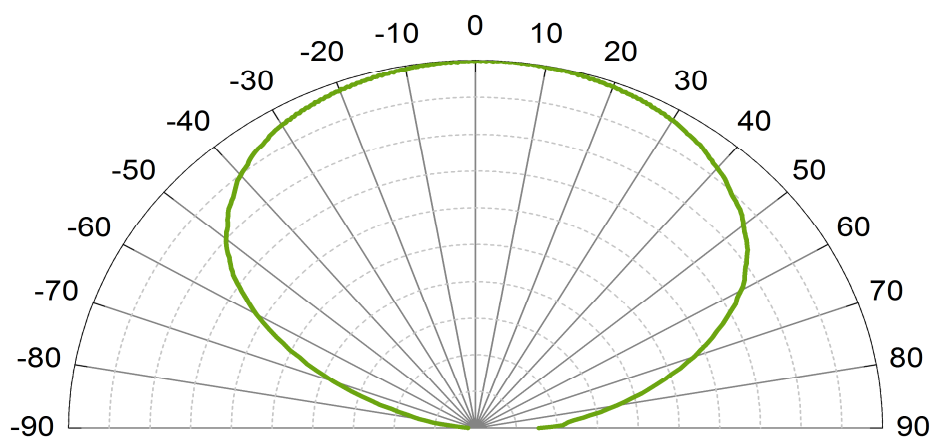
Infrared LED Chip

EOLC-1300-21

Rev. 01, 2019



Peak wavelength vs. forward current



Radiation pattern

Packing

Dice on adhesive film with wire bond side up.

Art. No. 131 172



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.